

AMERICAN BEE JOURNAL

ESTABLISHED IN 1861 OLDEST BEE-PAPER IN AMERICA

DEVOTED EXCLUSIVELY TO THE INTERESTS OF HONEY-PRODUCERS

Published Weekly at 118 Michigan St.

GEORGE W. YORK, EDITOR.

\$1.00 a Year—Sample Copy Free.

38th Year.

CHICAGO, ILL., NOVEMBER 24, 1898.

No. 47.

CONTRIBUTED ARTICLES

Dried-Up Foul Brood—Cocaine for Bee-Stings.

BY PROF. J. A. COOK.

I have a letter from a Los Angeles county bee-keeper, accompanied by a specimen of foul brood which has dried down in the corner of the cell. He asks if it is foul brood, and wishes to know how one can tell if the disease is present at such times, and if it can be positively told.

I should like Mr. Taylor to reply to this question. In this case it is not difficult at all to surely diagnose foul brood. The odor of the disease is unmistakable. The comb was in a close tin box, and, so, very favorable for such determination. As all know who have had any experience with this malady, the odor is very pronounced, very penetrating and unmistakable. When my children were small, I used to get many samples of diseased brood. The children would frequently bring me the mail, with the box containing the diseased brood still wrapped in paper, with the remark, "You have more foul brood." I found that a sample with very considerable amount of the brood—a score of cells, more or less—would very frequently be revealed before any of the wrappings were removed.

In the case of this sample before me, there are other signs. Cells with sunken caps, and with some of the caps perforated, would surely arouse suspicion. In Southern California, the bees can get some honey nearly, if not quite, every month of the year, and so brood-rearing has not that long quietus that is known in the East. So I think this question has not the practical importance that might be given it. In the East the bee-keeper is behind the times whose information and alertness does not enable him to know and detect this disease, while the bees are active. In case of buying bees in the fall, there might be occasion to make such examination.

The scale of dried matter is hardly sufficient for determination, at least by other than the expert. Of course, the bacteriologist could always make cultures and ascertain the presence or absence of the fungoid matter, but this would not be of use practically. I, for one, would be glad to hear from Mr. Taylor on this subject, as also on the matter of hives. The "Inspector" of Ontario says it is safe to use hives from which diseased colonies have been removed, at once, if I understand his position, without subjecting them to a boiling temperature. His long experience should make him an authority. If boiling the hives is needless, it would save much trouble. From the nature of the disease, we would fear to trust such a hive until it had been thoroughly disinfected. I am sure if Mr. Taylor will give his views in these matters, he will confer a favor.

I think foul brood is quicker to lose its grip in California, and sometimes at least is not so virulent as in the East. I know of more than one apiary where there were colonies badly affected, where no pains were taken to eradicate the disease, and yet it has entirely disappeared. This, however, should not quiet the apprehensions of any menaced bee-keeper, for I have known other cases where apiaries went all

to pieces the second year after the disease made its appearance.

BEE STINGS AND COCAINE.

In a recent number of "Nature," cocaine is given as a speedy remedy from the pain of bee-stings. It is stated that simply applying it will immediately relieve suffering. In succeeding numbers of the same journal it is urged that care should be exercised in the use of this drug. That the warning is timely, appears from the fact that in many cases its use is attended with quite serious consequences. I think all reputable physicians agree that we cannot be too cautious in the use of any of the narcotics, like cocaine, morphine, etc. In rare, exceptional cases they come as very angels of mercy; but one is very unfortunate who is called to use them with frequency.

Los Angeles Co., Calif., Oct. 31.



No. 3.—The Care of Bees for Wintering.

BY C. P. DADANT.

In my last, altho I called attention to the bad quality of fruit-juice as winter food, I have perhaps not laid enough stress upon it, for I consider, from actual experience, that the



Prof. A. J. Cook.

results of a supply of this food are deadly to the bees; the more so as they store a great deal of this kind of food when the real honey has failed. This fruit-juice is not honey; it is neither more nor less than cider, which becomes more or less acid, and is positively sure to cause disease. The only way to

deal with this food, if one wishes to save the bees, is to extract it out of the combs, and furnish the bees with more wholesome supplies.

Of all the grades of honey for wintering, honey-dew is the worst; next comes dark fall honey, especially if thin and watery, or if uncap, as the moisture escaping from the bees will render it still worse. The hygrometric properties of honey are so marked that, during a damp season, unsealed honey will often accumulate moisture enough to overflow out of the cells, and will perhaps besmear the bees as they first bestir themselves after a period of constrained repose. Hence it is advisable to remove, in the fall, all unsealed honey; most especially if the bees have enough without this. If the quantity is limited, it is not so urgent to remove it, as they usually consume the unsealed honey first, and may get rid of it before the coldest weather, which confines them to the hive for weeks at a stretch.

There is another source of injury to the bees in fall honey which is heavily loaded with floating grains of pollen, and is the more dangerous that it is least easily detected by the apiarist. These floating grains of pollen are not discernible to the naked eye. The best bee-food for wintering is that which contains the purest saccharine matter, as it is most thoroughly digested by them, with the least production of discharges. Since the bees are often compelled to remain, for from three to six weeks, confined to the hive, and during that time are closely clustered together, it is out of the question for them to void their excrements, and when the food which they eat contains a great deal of pollen, or is too watery, they are often unable to retain their discharges, and must either go out and perish, or release their bowels in the hive, thus besmearing the combs and their sister bees, with the most foul and offensive excrements. In either case, it is death.

When the bees are in a cellar, the evenness of the temperature, under proper conditions, enables them to consume a minimum quantity of food, and they stand a much longer confinement with ease, if the food is right, than when out-of-doors. From the above statements, which are based upon over 40 years of wintering experience with large apiaries, the reader will readily see that the best winter food is to be found in the very best grades of honey. In a mild winter, as I will show farther, anything will do, for if the bees are not confined they have nothing to fear. When the crop is short, if good honey cannot be had in sufficient quantity, the artificial supply may be provided, by adding sugar syrup to a certain quantity of honey, and very good feed may be made by using a mixture composed in the following proportions: Sugar, 50; water, 25; honey, 25. The water is first heated to the boiling point, then the sugar is thrown in, and after it has slightly cooled the honey is added.

Feeders of all kinds are made, and it is not the purpose of this article to recommend that such a feeder be used as will enable the bees to take their food above the combs and as close to their brood-nest as possible, to avoid the depredation of heat.

I said that from 25 to 40 pounds were needed, but have given no way of ascertaining the quantity, short of weighing the hive, which is impractical in most instances. Those who are accustomed to handling bees usually judge of the amount by the space occupied with honey, and this is probably the best criterion. We would call a hive sufficiently supplied if the honey occupied about one-half of eight combs, the upper half of course, since bees always place their stores above and behind their brood. But we use hives with 10 combs, and like to see these 10 combs half filled, at least. Too much honey is better than too little, and if we would have success with bees, we should not begrudge them a little more than they are likely to need. But it is necessary for them to have a sufficient space of dry comb at the bottom to cluster on; for they fare much better, and keep warmer, if they can keep the bulk of their cluster below the honey, on empty cells.

We will next consider the advantage of winter flights, and of shelter.

Hancock Co., Ill.



Frame Spacing at Top and Bottom.

BY A. P. RAYMOND.

I am aware that frame spacing is an old, well-worn topic, having been thoroughly discussed many times, but I am also aware that many bee-keepers are not as yet giving this matter as much attention as its importance demands, consequently I trust I may be pardoned for again referring to the subject.

No feature connected with the use of loose-hanging frames should receive more careful consideration than that of spacing. Every practical bee-keeper is cognizant of the fact that frames of comb are of the greatest value when they are per-

fectly straight, the cells being of equal length upon either side, for they are then interchangeable and can then be placed in any part of any hive in the apiary without inconvenience to ourselves or the bees. They can also be readily turned end for end in a hive, which is often necessary.

Experience with loose-hanging frames has convinced me of two facts, viz.: If we are to obtain the best possible results from their use the combs must be built in them evenly and perfectly, as described above; also, if we secure such straight, even combs, the frames must be *accurately* spaced.

Now, what I mean by frame spacing includes not the tops only, but the bottom of the frames as well. If we take the trouble to space but one side of the frames let that be the bottom—the tops are where we can readily see them, and by using our eyes as guide we can space them quite accurately, the only difficulty being that they will not stay spaced while handling or moving the hive. We may construct our frames ever so carefully, having them perfectly true and entirely out of the wind, and still we are not relieved of the duty of bottom spacing, because however truly an empty frame may hang in a hive, when it is filled with comb, brood and honey, it may be found hanging out of plumb, caused by more brood or honey being placed upon one side of the comb than upon the other. Now, when a frame hangs out of plumb, the bees make the matter still worse by lengthening the cells upon the heavier side and putting in still more honey; if the opposite side contains brood the cells of course must remain only the proper length.

If we wish to remove a frame and place it in another hive, and we find it in the condition described above, it causes trouble to ourselves and extra work for the bees. The fact establishes, that the duty of frame spacing is imperative if we are to receive the best results, the question now arises, what method of spacing shall we adopt? For the benefit of those who wish to use it, I will give a method of top-spacing which I have recently devised, and which I think, without being egotistical, is superior to any other with which I am acquainted.

After removing the head from a six-penny wire finishing-nail drive it longitudinally into the end of the top-bar of the frame directly underneath and close to the projecting end. It should be placed directly in the center of the bar transversely, and driven in until the out end of the nail is flush with that of the bar. Now, with a three-cornered file I make small V-shaped depressions or notches upon the upper edges of the metal rabbets, which are used in the hives, $1\frac{1}{2}$ or $1\frac{3}{4}$ inches apart, as may be desired, and just deep enough to correspond with the diameter of the nail, which, being driven in, has now become apart of the projection of the top-bar. (Do not make the depressions too deep, about $\frac{1}{8}$ inch is sufficient.)

When the frame is placed, as now arranged, in the hive, the nails which have been driven underneath the projecting end of the bar rest at right angles upon the metal rabbets, and will quickly drop into the depressions as they strike them, and the entire width of the projection will rest upon the rabbet. The weight of the frame will hold itself in place. These depressions should in every case be V-shaped, as the frame may then be crowded upward and also to one side with only one motion. They may be more rapidly made by machinery, or possibly with a steel punch and a hammer; this applies of course to the construction of new rabbets. I think that by using a small file the depressions can be made in the rabbets of the hives already constructed without removing them from the hive; it may be rather slow work, but you will never regret the time spent, as it will save much valuable time in spacing frames during swarming, when one minute is sometimes worth more than are 10 minutes at some other seasons of the year.

This method may also be adopted by those who do not use metal rabbets; by using a chisel the V-shaped depressions may be made upon the wood rabbets of the hive; in such case the depression should extend across the entire width of the rabbet, and it would probably be better to use an 8-penny nail instead of a 6-penny underneath the projection of the top-bar, and consequently a little deeper depression in rabbet.

I believe this method has several advantages over the staple or nail methods of spacing. The nails underneath the projections of the top-bar are not in our way in the least while manipulating the frame; the frames can be readily and very easily moved to one side, allowing us to remove a central frame from the hive without first removing the dummy or division-board at the side.

Again if we wish to store a quantity of frames, either empty or otherwise, they occupy less room than if their sides contained nails or staples; the nails resting upon the metal rabbets prove an advantage in moving the frame from side to side in the hive, as they glide very easily along the edge of the rabbet.

The simplicity and cheapness of this method are also in its favor.

For a bottom spacer I have never seen anything I liked as well as the one made of wire, described in Langstroth Revised. Some may object to this spacer because it is old, but I would not discard it until a better one is invented to take its place. This spacer, however, is greatly improved and strengthened by taking a strip of firm, straight-grained pine or basswood $\frac{1}{2} \times \frac{1}{2}$ inch, and a little longer than the width of the hive, and cutting a saw-kerf the entire length directly in the center of the strip upon the widest or half-inch side $\frac{1}{8}$ inch deep. Now take the wire spacer after it is carefully made, and press it firmly into the saw-kerf; it requires no fastening to hold it in the kerf, providing the kerf is the proper width, that is, a trifle narrower than the diameter of the wire used. By using this strip we are enabled to use a smaller wire than we otherwise would, and still our spacer is very strong; the smaller wire is more easily and rapidly bent the required shape.

The strip can be placed in position in the hive by making a very shallow mortise upon each side about 1/16 inch deep, and springing the strip into place.

We should place this spacer in the hive so there will be a $\frac{1}{4}$ inch space between it and the bottom-board.

It is a little trouble to arrange our hives with spacers, but we will be amply repaid by doing so.

Clark Co., Wis.

CONVENTION PROCEEDINGS

UNITED STATES BEE-KEEPERS' UNION.

Report of the 29th Annual Convention Held at Omaha, Nebr., Sept. 13-15, 1898.

DR. A. B. MASON, SEC.

SECOND DAY—FORENOON SESSION.

[Continued from page 724.]

PARAFFINED SEPARATORS AND FENCES.

"Who has had any experience with paraffined separators and fences? and what is your opinion of them?"

Mr. Danzenbaker—I can claim that I have had some experience. I believe I was the first one to mention the matter. Here is a sheet of paraffined paper. The intention was to use this in covering over the super, and you could put a covering over it—a piece of carpet, or a piece of enameled cloth. The intention was to keep the other clean. When you use enameled sheets, you always have to clean them off. Use them once, and if they get soiled they stain the sections wherever they touch. This paper is clean; you can use it once or twice and then throw it away. It is very cheap. The question is, how long will it last? Here is one piece that has been used several times. Some say the bees eat it. There is no hole in that piece: this sheet is cut along the edge. That was put on right in the height of the white clover honey-flow. The bees don't eat it for me, only where it is not prest down tight. Where it is used with weight enough on it to hold it tight, they won't cut it out. When used for separators, without any pressure on the other side, they cut it, and I abandoned using it in that way. The bees will gnaw it if it is laid on the super without anything over it. For separators it will not do.

Mr. Hatch—I would like to say that I used paraffined paper last year, and I found it perfectly worthless. It was no better than so much newspaper laid over the combs. The bees will gnaw through it in no time. And if the wind is blowing, it takes three boys and a man to put the sheets back on the hives when they are taken off.

Mr. Danzenbaker—The intention in putting that on is to have it done in the shop, not in the yard. In examining the supers I don't take the sheets clear off: I just raise up one corner.

A paper written by S. T. Pettit, of Ontario, Canada, was then read by the Secretary, as follows:

Advanced Methods of Comb Honey Production.

The subject assigned me is an important one. The greatest difficulty in dealing with it consists in the large number of supposed-to-be superior systems, and every one wedded to his own. But for all that, the advancement recently made in the fine art of taking comb honey is marvelous indeed, and I often admire men and methods.

Presuming the object in view was that this paper shall be helpful rather than a delineation of many and conflicting methods, I shall in the main confine myself to my own system, believing it to be the best.

First of all, quality and reputation must be maintained, even if necessary at the expense of quantity. The comb foundation must be faultless. The filling of the brood-chamber at the approach of the clover flow or maincrop with sugar syrup. I regard as a most pernicious practice. I state this with due respect for the views of others. Later on I will give a better way.

May I digress long enough to state that the statutes of Canada, when any such syrup reaches the supers and is offered for sale, make such practice a willful adulteration, and the Government, at its own charges, will do the prosecuting.

It is no digression to state that perfect wintering is a mighty factor in the production of comb honey.

It is not enough to bring 95 or even 100 percent of our colonies through the winter alive; we should see to it that they are practically in the same condition that they were at the approach of winter, with plenty of stores, healthy and strong, and able to rush out and catch the first and every honey-flow coming within reach.

And then the spring management must be such that the brood-chamber at the time of giving section supers is practically full of brood from side to side, and from front to rear. Briefly, then, to this end brood spreading, timely and judiciously, with some uncapping, generally must be practiced.

And now for the better way: When the spring flow sets in sharply, in order to leave the whole brood-chamber to the queen, and to provide against the practice of feeding sugar syrup, extracting-supers must be given. These, with their contents, are left on to keep up brood-rearing until clover yields freely. These supers are then removed and comb honey supers take their place.

Generally, at this time, if the work has been well done, the brood-chamber will be practically full of brood, which will be of far greater value than sugar syrup, and it costs nothing; and your comb honey will be pure, and your reputation unsullied. With this management no bait combs, half-supers, nor double brood-chambers will be wanted. The bees will go up for "standing-room," and go to work with a right good will.

I must not forget to state that at the time of changing supers the combs containing the most and youngest brood should be placed next to the sides of the brood-chamber. This will make more room for the queen, retard swarming, and force the honey into the sections; and then when swarms do issue their numerical strength will gladden your weary hearts, and cause you to rejoice in hope of a rich reward.

The large entrance has become an indispensable necessity in my practice. For that purpose I used the wedges so often referred to; and the dividers for creating a double bee-space at the outside of the sections, are also indispensable; the former distributes the bees, and the latter hold them just where wanted—so much so that sometimes the outside and rear sections actually get ahead of those near the entrance, but that is not the rule.

The habit of the young bees meeting the field-bees above the entrance near the center is so strong that a cluster is sometimes formed, and the field-bees continue to go up at the center; but a little cool weather will usually break that up, and proper distribution will follow.

Hive swarms on starters, in hives contracted to about two-thirds of the size by the use of dummies. Let them remain upon the old stands, and at once transfer the supers to the new swarms. A queen-bar or queen-excluder must be used. Give shade and a lot of top ventilation, which should be closed on the fourth or fifth day in the cool of the evening. We may yet learn how to continue top ventilation with much profit.

What seems to me the most difficult thing is to give the right amount of super-room. I would say, be careful to give enough, and be just as careful not to give too much. But what's enough and what's too much? How shall we know? Well, I reckon from existing conditions and prospects, years of careful observation and practice will guide us pretty well.

Want of space forbids giving many pointers. My experience with deep-cell foundation, fence separators and plain sec-

tions is too limited to be of value. But whatever changes we do make, I hope we will not depart from the standard $4\frac{1}{4} \times 4\frac{1}{4}$ section—the cost will be too great for an imaginary gain.

NOTE THESE FOUR POINTS:

1. Foundation should touch the sides of the sections and come to within one-sixth of an inch from the bottom-bar.
2. I have used thousands of bottom starters, and fail to find much benefit from them; but I have found this, that if they overlap a quarter of an inch or so no harm will result; the bees will cut them to fit, and unite them all right.
3. If holes are found in the septum of foundation the bees lose time, and add too much wax in mending.
4. Feeding back, on account of granulating in the sections, should be discouraged.

S. T. PETTIT.

Mr. Spaulding—I disagree with one point in regard to bottom starters. I find them a great benefit. I used to notice that the bottom pieces of the sections would be pulled away by adhering bur-combs, but since using the bottom starters the bees fasten them so securely that I rarely if ever pull off the bottom of the section in removing the honey from the hive. I use a starter about a half inch.

Mr. Hatch—What kind of super do you use?

Mr. Spaulding—I have used the plain sections and the super that goes with them.

Mr. Westcott—I would like to hear whether there is anything really gained by using full sheets of foundation, or whether there is enough gained to pay the cost of buying the foundation. I have tried both ways, and really the results have been about as good with a good, fair starter as with full sheets of foundation.

Dr. Miller—It might be instructive to ask the question. How many have tried both ways, and how many prefer only small starters?

On a showing of hands, 21 were found to have tried both plans, 17 of whom preferred full foundation, and 4 of whom preferred starters only.

Mr. Danzenbaker—I would like to say a word in regard to the matter of $4\frac{1}{4}$ inch sections. Here is a 4×5 section, and here is one $4\frac{1}{4} \times 4\frac{1}{4}$. I will stand them right up here together. Let me say another word, as it was printed in the journals—both in the American Bee Journal and Gleanings—that I use bottom starters, I think I am entitled to say that I do not. Some five years ago I bought some foundation that was intended to be used in certain sections, and it wasn't deep enough to reach as far as I wanted it to, and so I was forced to use bottom starters to piece it out. I didn't like the plan. In putting in foundation, I always leave a bee-space so the bees can pass under. They fasten it at the bottom as soon as they do at the sides. This little box of honey here, I will venture that I can put it in the express office and ship it to Washington, and that it will go all right. I shipped one from Washington to Gray Gables, to Mrs. Cleveland, and got a letter saying that it went through in good order. Again, about the size and shape of the sections. A pound of honey is just as heavy in the 4×5 sections as in the other form, and when you come to sell them, the 4×5 sections sell more readily. I can sell the 4×5 faster than I can the other. It makes a bigger show. When I sell honey to consumers, I tell them to take their choice, and one time I sold 48 of the 4×5 sections to two of the others. The 4×5 sections don't hold any more honey, but they look bigger; 48 of the 4×5 weighed 47 pounds; 100 of this other size, with cleated separators, weigh from 93 to 97 or 100 pounds, depending on the season. This year was the driest I have ever known, and the comb was not filled out quite so well. I cannot agree with the statement that it is so expensive to change from the $4\frac{1}{4}$ sections. There is no need of the sections costing any more, and the supers can be changed very easily, by nailing a $\frac{3}{4}$ inch cleat on. The expense of changing is almost trifling; the sections will cost no more, and the cost of nailing the cleat on the super will not exceed 5 cents to the super.

A. I. Root—Mr. Acklin has some figures in his memorandum book that he could give us in regard to the relative cost of producing comb and extracted honey.

Mr. Acklin—At our out-apiaries 3 cents a pound was the actual cost for extracted honey, and $6\frac{1}{2}$ cents a pound for comb honey.

A. I. Root—That agrees with Mr. Hatch's 3 cents a pound in Arizona.

Mr. Hatch—He says he figured the actual cost of extracted honey at 3 cents a pound. I sold my crop at $3\frac{1}{2}$ cents, and cleared up \$1,100 for the services of myself and family for the summer, excepting our board-bill.

Dr. Mason—How much did the honey cost per pound?

Mr. Hatch—I could not say. We paid all hired help and

all expenses, except our board-bill. I was an invalid, and did not do anything for six weeks. Mr. Acklin gave 3 cents a pound as the cost of production. If I could get 3 cents a pound in Arizona, I could make money.

Mr. Acklin—Don't you get larger crops in Arizona than we do in the northern part of the United States?

Mr. Hatch—My average, with 550 colonies, was 120 pounds of extracted honey.

Mr. Acklin—Do you keep those colonies in one apiary?

Mr. Hatch—No, sir; they are in three apiaries.

Dr. Miller—Here is something that is of very great interest to us, and that is as to the size and shape of the sections; and right here is the place where we can get information upon the subject that perhaps we cannot get anywhere else, as to the relative value of the two kinds of sections. I for one would like to know if there is really any advantage. If the 4×5 sections are worth more, I must change, but I want to be pretty sure of my ground. I don't want to pay out \$50 or so unless I am pretty sure there would be money coming back to me for it. The question is, whether those who have had experience with both kinds of sections can tell us whether the deep section is better than the square.

Mr. Westcott—I think there is a good deal in being used to them. A three-cornered section might look nice for awhile, because it would be something new; but after I have looked at them for awhile I like the looks of the square section as well as I do the other. I don't know why the honey won't sell just as well, either. If we change from one to the other, it will cost a great deal. The bee-men mostly have supers for square sections, and when we make these changes they add a great expense.

Pres. York—We are not considering the appearance of the honey that is now in these sections, but the shape of the sections themselves. The honey is not of the same grade in both sections. Will those who prefer the tall sections please stand and be counted?

Ten declared themselves in favor of the tall sections, while 15 declared in favor of the square sections.

Mr. Hatch—I ran 250 colonies for Mr. Mendleson last year. I like the Danzenbaker hive and section first rate, and always have. Mr. Mendleson took some of the honey in these sections and went into a store where they were paying 9 cents for just the same honey in other sections, and he got $11\frac{1}{2}$ cents for his. They had none of the tall sections, but they could get plenty of the other for 9 cents. They have a fancy trade at Los Angeles and Pasadena, where there are a great many wealthy people who don't care for cost. If a thing suits them they will take it and pay for it. To cater to that trade it is certainly desirable to have that kind of section.

Dr. Miller—Suppose there had been on the market the same number of square sections as of the tall ones, or suppose the tall sections had been in the majority and the square ones in the minority, would the same relative prices have held good then, do you think?

Mr. Hatch—Of course I could not answer that question, because I don't know. There was no shortage of the square sections; there was an over-supply, if anything.

Mr. Danzenbaker—I am sorry to see that the majority of the convention are in error on this matter. The expense of the change doesn't amount to anything. I have been in the business for a good many years, and have tried a good many changes; I am always changing where there seems to be anything to be gained by it. I met Capt. Hetherington, and in talking about the tall sections he said they sold better. I wanted to buy a case of his honey, and he said it was all sold. He produced 30 or 40 tons of honey, and it was all sold before it was produced. I said I wanted one case, at any rate, but he said it was all contracted for, and at that time he got 17 cents—about 2 cents above the market. I begged of him a half-dozen sections, and took them and put them on a hive, and I was surprised to find that in the same super they were the best filled and the best finished. Then I got a thousand, and took them to market to find how they would go with the people. I set the tall sections upright, and told my customers to take their choice. I sold 48 of the tall sections while I sold 2 of the others. Then I put 2 cents more onto the price, and that didn't stop it. Then I laid the tall sections down the other way, and I was lost! It depended on whether they were standing up or lying down. I was in stores where honey was sold in 2-pound sections, and they were the best finished I ever saw. They were finished at the top and bottom alike. Only an expert, who knew the pitch of the cells, could tell which was the top and which was the bottom. Those sections were selling at 15 cents, and the others were selling at 10 cents. I ask, "Don't you lose money selling 2 pounds for 15 cents when the other sells for 10 cents a pound?" He says, "I can make more money producing honey at 2 pounds for 15

cents in those sections than I can at 10 cents a pound in the others. I can get so much more of it. They go to work quicker, and finish it faster." I took this year 900 finish sections from 14 colonies, and it has been the driest year I have known since I have been keeping bees. One of my neighbors who had 300 colonies with the other sections didn't get a single super filled, and he was right in the same locality. This year I didn't get the honey quite as white as I wanted it, because the blue thistle was a failure. This honey that I have is a mixture of sumac and other flowers. I sell my honey in Washington, and I get 15 cents for all I grade as No. 1, and 13 cents for No. 2. I can go into Washington and buy the other for 11 cents, while I am getting 13 and 15 cents for mine, and I have a good market all the while. If you will try the change, you will find the difference. I would like to ask if there is a single man in the United States who has ever used the tall sections that was willing to go back to using the square sections.

A Member—I bought the Danzenbaker hive a couple of years ago, and 1,000 of the tall sections, and I went to work and got them filled and took them into the Salt Lake market. They looked well, but I couldn't sell them as I could the others. The convention then adjourned until 1:30.

(Continued next week.)

QUESTIONS AND ANSWERS

CONDUCTED BY

DR. C. C. MILLER, MARENGO, ILL.

[Questions may be mailed to the Bee Journal, or to Dr. Miller direct.]

An Explanation of the Delayed Answers.

Some of the friends will find their questions answered in this number which they expected answered several weeks ago. Please don't lay the blame on any one in Chicago. It lies some 60 miles Northwest of that wicked city. The questions were promptly answered, put in the envelop to be taken to the office, and by some mysterious process hid themselves out of sight in the vehicle in which they were to be carried, only to come to light when a snow-storm made it necessary to shake out the carpet on the floor of the vehicle. I can only say I am exceedingly sorry for the delay, but ask that you will lay no blame on the shoulders of the already overburdened editor.

C. C. MILLER.

Two Hive-Stories for Wintering.

I have noticed in recent issues of the American Bee Journal that you speak favorably of the plan of wintering strong colonies of bees in two-story hives. Without knowing anything about your practice in this matter, I venture to presume that you place a hive filled with frames of comb under the colony in the fall and leave it there until it is time to put on supers the following spring. In the absence of frames of comb, would you fill with frames of foundation? And in the absence of both frames of comb and foundation, would you venture on the use of frames having starters of foundation only?

I have a good many hives in which the bees seem to be too numerous to winter comfortably without more room. My stock of combs is used up, and I have no sheets of foundation on hand, but can procure them if necessary. I have some foundation cut into wide starters. What would you do under the circumstances?

IOWA.

ANSWER.—One of the reasons for having a second story in winter is to have more room for a strong colony. I don't believe, however, that this counts for such a great deal. The strongest colony you have will very likely have no difficulty getting inside the hive, come cold weather. Another object is to have combs below to contain extra stores, so there need be no sort of question as to whether the bees will need feeding before flowers yield. Still another object—and I'm not entirely sure just how much weight it should have—is to have the cluster of bees somewhat removed from the outer air, so that a cold blast of wind will not strike so directly on them. If I am correct in these views, the best thing is to have in the story that is below, combs containing more or less honey. If you have no combs containing honey, then empty combs will answer the purpose, only you may have to look out for feeding

in spring, also not necessarily so. The empty combs will do to cluster on, and will serve as a wind-break. If you have no combs, it is quite possible the under story may still be of advantage, for the blast cannot blow so directly upon the cluster as with only one story. But I don't see any special object in having frames partly or wholly filled with foundation. With plenty of room below the frames, the bees will cluster as well upon air as upon starters. And you may be pretty sure that after the bees have wintered upon foundation it will not be so acceptable to the bees. The only good I can think of that would come from having starters or full sheets of foundation in the lower story would be in providing so much of a hindrance to the free force of the air, and you could secure this in some other way. A little board might be dropped inside that would prevent direct passage, but would provide plenty of room for the bees to pass around it. A man with your inventive turn may think of better ways, but certainly I don't believe you ought to let the bees have foundation over winter, either full sheets or starters. If you leave a lower story without combs or frames, you will in some cases have combs commenced on the bottom-bars, but this is a small matter, as the loss is small, and the bits of comb are easily cut off.

Oats Chaff for Winter Packing.

Will oats chaff be all right for packing around hives for winter? I see wheat chaff and planer-shavings are generally recommended, and as I cannot get either of these, I thought it possible oats chaff would do as well.

KANSAS.

ANSWER.—Oats chaff will do very well. Be sure to keep it dry.

Cellar Temperature for Bees.

Is there danger of getting a cellar too warm for bees? Suppose the temperature was up to 65° for any length of time, would it do any harm? Do you know of any case where the temperature was so high that the bees did not winter well?

MICHIGAN.

ANSWER.—I doubt whether there is much danger of a cellar being too warm, *providing* the air in the cellar is all right. With good, pure air, 65° could be borne for a considerable time, and it might do good to have that temperature for a day or so when the bees become uneasy in winter. It is possible that 65° continued for a week or two might start bees to breeding—an undesirable thing in winter—but with pure air, darkness, and quiet, I should hardly expect it. I think there have been reports of bees being kept too warm in winter, but I cannot now say by whom. It is generally considered that somewhere about 45° is the best temperature for bees in a cellar. If you can control the temperature, keep it at that point where the bees appear to be in perfect quiet.

Hive-Entrance and Packing in Winter, Etc.

1. How large ought the entrance of a hive to be throughout the winter, when wintered on the summer stand?

2. I have a few colonies in a pear-orchard. How would it do to put up a wall on the north and the west sides of each hive, making it double, then pack with forest leaves, and also put a cover over them to keep the rain and snow off? Does it make any difference how far off the wall is?

3. I have a colony in a box-hive that did not swarm all summer; sometimes they hung out until it seemed as if there was no more in the hive, but the hive was yet full and they had plenty of honey. Once they were all in the hive and I could see nothing but drones on the alighting-board. What was the cause of all this?

4. Do ants stay in the hives through winter?

5. My bees have been carrying pollen all summer, and up to-day (Sept. 22), they are still carrying it. Do they need so much to winter them?

6. How much ought the body of a Langstroth hive weigh with a strong colony and full of honey?

ILLINOIS.

ANSWERS.—1. The general practice favors an entrance the full width, and $\frac{3}{8}$ to $\frac{1}{2}$ -inch deep.

2. It ought to answer well. Yes, it makes a difference. Let the wall be as near as convenient.

3. It is nothing very strange that a strong colony should go through the season without swarming, and many a beekeeper would give money if all his bees were of that kind. Very often you will find the drones clustered together on the bottom-board, especially when forage becomes scarce and the

workers have decided they don't care any more for the company of the drones.

4. If there is a place where the ants can get, and the bees cannot reach, as for instance when quilts are used, ants may stay all winter, the heat from the bees being agreeable to them. Nowadays very many use plain board covers, and these furnish no hiding-place for ants, either summer or winter.

5. It's hardly so much for winter that they're carrying it in as for daily use. They'll winter without any pollen, but they'll not rear brood without it.

6. If an 8-frame hive weighs 50 pounds, including plain cover and bottom-board, it is likely to have enough stores for winter, but it will not be a bad thing to have it heavier. Perhaps a 10-frame hive ought to weigh nearly 10 pounds more.

Dividing for Increase

Did I do right last spring in dividing my bees? There was a heavy colony from which I took three brood-frames that had eggs. I didn't know whether there was any queen-cells or not.

I have 22 colonies, and they have done very well this summer. I sell my honey at home for 8 and 10 cents a pound.

MICHIGAN.

ANSWER.—From the testimony you give in the case there is no evidence you did anything wrong. At the same time while one might take three frames with eggs and manage to perfection, one might also take three frames with eggs and manage pretty badly. One of the best investments you could possibly make would be to get a text-book on bee-keeping and study it thoroughly. Then, knowing fundamental principles, you might manage many different ways in making increase and be right in all of them.

Introducing Queens—Wintering.

1. When is the best time to introduce Italian queens?

2. Where the chaff hive is not in use, what is the best method for wintering bees?

KENTUCKY.

ANSWERS.—1. That's a matter that depends a good deal on one's own convenience. If it is a colony run for honey that is to have the stranger introduced, it will interfere less with the honey crop to introduce toward the middle or end of the honey harvest. But if you wish to rear other queens from the new stock, it will be better to introduce at or before the beginning of the harvest. The advantage of being able to rear queens from the new stock will more than counterbalance the disadvantage to the honey crop.

2. For some places cellar-wintering is best, and for some it is better to winter out-doors. As far south as Kentucky you will probably do better out-doors, providing some shelter against wintry blasts, unless the bees are in a location naturally sheltered from prevailing winds.

One or Two Stories in Winter—September vs. May Queens.

1. I have my bees in dovetail 8-frame hives. Is it preferable, in wintering on the summer stand, to use one or two stories?

2. Will queens reared in September be as prolific as queens reared in May, drones being present?

N. C.

ANSWERS.—1. If you have the hives on hand, you may as well use the two stories. I should rather have the two.

2. That depends on weather and pasturage. If the weather is cool in May, and there is little or no pasturage, queens will not be as good as those reared in good weather with good pasturage in September. If the weather is warm in May, and there is good pasturage, queens will be better than those reared in bad weather with poor pasturage in September. Take the average May and the average September, and in some places one will be better and in others the other. Because in one place the weather and pasturage will be better in May, and in others in September.

What Ailed the Bees?

I bought four colonies of Italian bees in the spring, and sold two of them to my neighbor, thinking two was enough for me to begin with. One of them did very well. I have four new colonies and the old one. I got about 200 pounds of honey from them. The other one didn't do much. It stored some honey, but did not put any in the super. It seemed to

have young bees and brood nearly all the time, but they were all the time dying. They would get weak and stupid, and die; hang around in the hive and drop down on the bottom dead in handfuls a day. They would drag out what they could, and finally they all died, leaving in the hive about 30 pounds of honey.

1. I would like to know what was the cause of their dying.

2. Is it safe to eat or feed the honey to bees?

3. Is it safe to give the frames with the honey and comb to new swarms in the spring?

KANSAS.

ANSWERS.—1. It's hard to say what the trouble was. It might be paralysis, it might be pickled brood, and there's a bare possibility it might be foul brood. If paralysis, a leading feature will be the trembling of the bees and the shiny black appearance. It will be worth your while to look up the matter of pickled brood in back numbers of the American Bee Journal, and to get Dr. Wm. R. Howard's little book on foul brood. Then you will be able to judge the case better than one who is not present.

2. It will be safe for you to eat the honey, but until you are sure there is no foul brood in the case, don't feed it to the bees.

3. Not unless you're sure there's no foul brood in the case.

Smoker-Fuel—Sowing for Bees—Propolizing.

1. What is the best thing to use to smoke bees? I have been using little pieces of wood such as I could pick up around the yard, but it just seems to set the bees to fighting, and they come right to the top as quick as I start to smoke them.

2. What do you think is the best thing to sow for the bees? Will buckwheat stand the frost? And what is the right time to sow it?

3. Is there any way to prevent the bees from sticking the sections in so tight that one cannot get them out? There are lots of balm or cottonwood trees here, and it seems to be the gum from the buds of these trees that they stick them with. There is also a great deal of it in the honey.

IDAHO.

ANSWERS.—1. Almost anything will do for smoker wood. Perhaps nothing is better than sound hard wood cut up into proper size to burn well, say pieces ¼-inch square, and as long as the smoker will take. But it's a good deal of work to prepare such fuel, and chips from the chip-yard, such as you are using, will answer just about as well. Something else besides the character of the fuel is at fault that makes your bees cross.

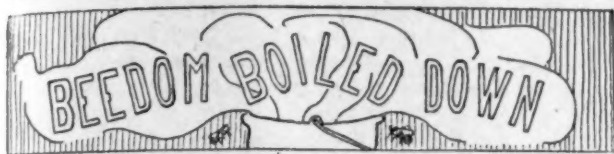
2. Buckwheat will not stand frost at all. Sweet clover will do as well in that way as perhaps anything else you can try. Buckwheat may be sown about the first of July.

3. Probably you'll never find any way to prevent the bees from bringing in propolis and filling up all cracks with it. It will do some good to have the sections so close together that there will be little in the way of cracks to fill. But where bees glue badly they will plaster the glue over the plain surface of the wood if there are no cracks to fill. Take off sections as soon as sealed. In that way you'll save some gluing.

Bee-Keeping for Beginners is the title of a 110-page book just out, from the pen of that expert bee-keeper of the South, Dr. J. P. H. Brown, of Georgia. It claims to be "a practical and condense treatise on the honey-bee, giving the best modes of management in order to secure the most profit." Price of the book, postpaid, 50 cents. Or, we will club it with the Bee Journal for one year—both together for \$1.40; or, we will mail it as a premium to any of our present subscribers for sending us one new subscriber to the Bee Journal for a year (at \$1.00), and 10 cents extra.

Langstroth on the Honey-Bee, revised by The Dadants, is a standard, reliable and thoroughly complete work on bee-culture. It contains 520 pages, and is bound elegantly. Every reader of the American Bee Journal should have a copy of this book, as it answers hundreds of questions that arise about bees. We mail it for \$1.25, or club it with the Bee Journal for a year—both together for only \$2.00.

The Names and Addresses of all your bee-friends, who are not now taking the Bee Journal, are wanted at this office. Send them in, please, when sample copies will be mailed to them. Then you can secure their subscriptions, and earn some of the premiums we are offering. The next few months will be just the time to easily get new subscribers. Try it earnestly, at least.



Domestic Comb Foundation is thus made, as given in *Southland Queen*: Take a piece of cotton-cloth, dip it in beeswax, lay it on a lot of peas, pile peas on top, press with a board, and you have your foundation!

Italians Working Where Blacks Don't.—L. B. Smith reports, in the *Southland Queen*, that his Italian bees work on a plant like Canada thistle, one variety of horsemint, and prickly pear, while blacks do not touch them.

Severe Effects of Stings, as nausea, palpitations, faintness, etc., the editor of *Revue Internationale* says investigations show to come only to those whose hearts are affected, and such persons should at any cost avoid being stung.

Foul Brood Smoked Out.—Alex. Astor reports in *Revue Internationale* that he cured foul brood by vigorously smoking every two or three days in the evening for two weeks. Editor Bertrand thinks a cure might be thus effected in the early stage of the disease before any spores are present.

A Warning is given by the *Canadian Bee Journal*. Last winter was very mild, and those who saw their own or their neighbor's bees come through safely on the summer stands without protection, may be tempted to leave all without protection this winter. But this winter may be severe, and the part of wisdom is to prepare for the worst.

Bees Defending Against Robbers.—F. A. Jacot says in *Revue Internationale* that Italian bees defend themselves best against robbers, Cyprians being close seconds, and Carniolans very poor unless crost. When he finds a colony that will not defend itself against robbers, he unites with it a small number of bees from a colony known to be good fighters, and the robbers will have no quarter. The irritation caused by changing seems to redouble their combativeness.

Plain Sections as to Grading.—Byron Walker, who produces large crops of honey and buys and sells thousands of pounds besides, says in *Gleanings* that honey stored in plain sections enters into the fancy grade in much larger proportion than that in old-style sections. W. C. Gathright says in the same paper that there is no doubt about bees working faster in plain sections with cleated separators. But he insists that the top of the separator should be $\frac{1}{4}$ -inch below the top of the section.

Bee-Keeping on the Mississippi.—The *American Bee-Keeper* copies from the *New York Herald* the following: "It is said that the idea of moving bees to pasture is carried on to a large extent along the Mississippi, where the hives are taken from place to place down or up stream on flat boats, that anchor during the day and are moved on at night while the bees are all in the hives, thus keeping them in fresh pasture all the time." Isn't that something that was done years ago, but not now, Mr. Hill?

Honey Coloring in Wax Extractor.—Complaint is made by some that when cappings are put in a solar extractor the honey is spoiled by being heated and made dark. John Newton says, in the *Canadian Bee Journal*, that he shades the honey-receptacle by putting a small piece of board right under whatever the wax is run into, just leaving space enough for the drip to run into. Each day's cappings are put into the extractor and melted before night. Mr. Alpaugh says it is important to keep the screen and pan perfectly clean, else the sediment will warm up next time and color the honey.

Shallow vs. Deep Extracting-Frames.—These were discussed in a Texas convention reported in the *Southland Queen*. With shallow frames and bee-escapes bees can be got off the frames without handling each frame separately. A super of deep frames is too heavy to use the escape. Two shallow frames can be uncapped quicker than a Langstroth. Ten shallow frames are taken off in the super and put on again in less

time than a single deep frame is taken out, brushed of bees and returned. With shallow frames, less trouble with bur-combs. Shallow frames are lighter to handle and don't need wiring. Shallow frames are not interchangeable in the brood-chamber; takes more time to make shallow frames for an apiary, and to put in foundation; you have twice as many frames to space, twice as many frames to handle, but shallow frames don't melt down so readily as deep ones.

Warming Honey Before Extracting.—Before taking the combs for extracting, John Newton goes around to the hives and places the entrance-blocks on, giving a few puffs of smoke. This causes excitement which warms up the honey, making it easier to extract. After the combs are taken from a hive for extracting, the entrance-blocks are removed. He objects to removing extracting-supers from hives to let bees leave of their own accord, as it cools the honey too much, making it sticky and stringy to extract.—*Canadian Bee Journal*.

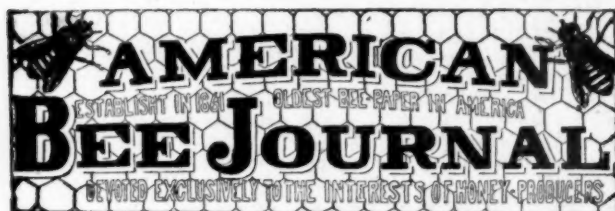
Price of Honey in Canada.—Editor Holtermann says honey is higher on this side of the line, but it doesn't pay to ship across on account of duty and other charges. *Montreal papers* quote comb honey right along at 7 cents a section. In Toronto it is quoted higher, altho *Montreal* has the wider, and therefore the heavier, sections. He thinks the inferior quality of some of the honey thrown on the market has the effect to lower the price, dragging down the good with the bad. On this side of the line poor honey on the market has the opposite effect, according to Editor Abbott.

Why Hybrids Are Preferred.—Hon. R. L. Taylor, in the *Bee-Keepers' Review*, says bee-keepers do not keep hybrids because it is too much trouble to keep pure Italians, but because the hybrids are better bees. "They are as good honey-gatherers, they go readily into the comb-honey supers—no fussing with bait sections—combs and comb honey supers are freed from them very much more readily; and as to the color, handsome is that handsome does." If that is true, those who hold the theory that pure Italians are better are on pretty safe ground, for in most cases the attempt to keep pure Italians results in the best grade of Italians.

Large Hives.—C. P. Dadant continues in *Gleanings* his discussion in favor of large hives. He says it is a mistake to think you can calculate just how many cells a queen needs, and furnish that number feeling sure she will use all of them. She works with a good deal of regularity till she gets to the edge of the comb, when "she quite often loses considerable time in regaining the thread of her work." In hunting for cells she wastes time and drops eggs which are wasted when much needed. With a larger number of cells these eggs would be saved, and an incentive to swarming removed. With large hives, the few swarms that do issue are larger and more profitable. The man with a small hive is not able to tell how much room his queens would fill.

Hive-Making and Stimulative Feeding.—Critic Taylor, in the *Bee-Keepers' Review*, doesn't advise bee-keepers to make their own hives with hand-saw and chisel. "If one has no saw-table of his own he can easily get the use of one by going not far from home." In reply to the intimation from H. F. Moore, on page 596, that said Taylor is heretical for holding the view that stimulative feeding does not pay, said Moore flanking his assertion by the statement that he can rear colonies by stimulative feeding for less than \$2.00 a colony, hives not included, Mr. Taylor thinks it would be safer for Mr. Moore to figure out his profits after he has sold his colonies, and thinks more money could be made making hives with a hand-saw.

Florida Bee-Shed.—John Craycraft is very enthusiastic over his bee-shed which he writes about in *Gleanings*. It is cheaply constructed, contains 112 hives, is octagonal, each side being $16\frac{1}{2}$ feet on the outside. "The posts are 3x4 inches, and rest on pine blocks. All the other timbers are $1\frac{1}{2}$ x3, using this size for rafters, ties, and roof-strips to nail the boards on, which are of cypress, 5 feet long, making the shed about 8 feet wide, so that my hives will lean back about a foot, leaving a walk 3 feet wide, as my hives are all 16 inches square, outside. But for the Langstroth hive the shed should be roofed about 10 feet wide, so that the hives could be placed back under the shed about a foot, leaving about a 3-foot passage. For ease of handling, the entrance to hives should be at the side, so that the operator can work from the side instead of from the end of frames."



GEORGE W. YORK, EDITOR.

PUBLISHED WEEKLY BY

GEORGE W. YORK & COMPANY
118 Michigan Street, CHICAGO, ILL.

[Entered at the Post-Office at Chicago as Second-Class Mail Matter.]

UNITED STATES BEE-KEEPERS' UNION

Organized to advance the pursuit of Apiculture; to promote the interests of bee keepers; to protect its members; to prevent the adulteration of honey; and to prosecute the dishonest honey-commission men.

Membership Fee—\$1.00 per Annum.

EXECUTIVE COMMITTEE—Pres., George W. York; Vice-Pres., W. Z. Hutchinson; Secretary, Dr. A. B. Mason, Station B, Toledo, Ohio.

BOARD OF DIRECTORS—E. R. Root; E. Whitcomb; E. T. Abbott; C. P. Dadant; W. Z. Hutchinson; Dr. C. C. Miller.

GENERAL MANAGER AND TREASURER—Eugene Secor, Forest City, Iowa.

VOL. 38. NOVEMBER 24, 1898. NO. 47.



NOTE.—The American Bee Journal adopts the Orthography of the following Rule, recommended by the joint action of the American Philological Association and the Philological Society of England:—Change "d" or "ed" final to "t" when so pronounced, except when the "e" affects a preceding sound.

The Chicago Bee-Keeper's Association will hold its second quarterly meeting at 9 a.m. next Thursday, Dec. 1, 1898, at the Briggs House, northeast corner of Randolph St. and Fifth Ave. A fine program is being arranged by the Secretary, H. F. Moore. Dr. C. C. Miller and other leading bee-keepers are expected from outside this county. It is hoped that every bee-keeper in Cook county will be present, and help to make this new local organization of bee-keepers a great success.

An Experience with Apis Dorsata.—In the British Bee Journal of recent date we find the following from Rev. T. J. L. Mayer, writing from Sheikhbudin, Punjab, North India:

"I have written for the last Government Blue Book on Indian bees. I think your chance with *Apis dorsata* is nil. I had seven colonies hived and fed all winter, and in the spring the little brutes decamped by 20 and 30 a day, until each queen, in turn, got disgusted and left the hive. Your only chance is with the hill bee, *Ghalozl*. No uncomb bees will ever be domesticated unless put into hives whose entrance-board is at the top, *i. e.*, under the eaves of our modern hives."

And yet there are those who want our Government to go to great expense to import *Apis dorsata*. Here is a man who had seven colonies of these bees in hives, and all of them left. It seems to us that bee-keepers in this country would better be satisfied with the Italian bees. Of course if our present bees can be improved by careful selection and breeding, so much the better. But we don't believe that our bee-keepers want a foreign bee that won't be content to remain in hives without being padlocked in, and the key hid somewhere.

"Pussy-Cat Style" of Criticism.—Editor Holtermann, of the Canadian Bee Journal, quotes this editorial paragraph from the Bee-Keepers' Review in reference to the style of criticism that some think obtains in the bee-papers:

"Perhaps you have not noticed it, but our apicultural journalism has somewhat degenerated in the line of criticism. It has fallen into what Mr. Heddon calls the 'pussy-cat style.' Attempts at criticism are couched in language so apologetic and 'mealy-mouthed' as to nearly rob them of all force."

Whereupon Mr. Holtermann offers this sentence of endorsement:

"By all means let us have done with the 'pussy-cat style' which too often means that one has not the pluck to say openly what one would say in secret."

Now, the only "pussy-cat style" of criticism that we think needs to be "done with" is the kind that resembles the scratching, spitting and yowling that one hears occasionally at night in some back alley where two or more "pussy-cats" seem to be having a dark but exciting convention. We have no use for that kind of "pussy-cat style," and the sooner it is "done with" the better for all concerned, not only in the back alley but also in any bee-paper, should the editor so far forget himself as to let such "pussy-cats" get started.

What is needed is criticism offered in a kindly, considerate Christian spirit. It should require no "pluck" to offer that kind, and it should be received in the same spirit as given.

Yes, sir, the "pussy-cat" or Tom-cat style ought to be "done with"—before it's begun.

Descriptions of Hives.—A subscriber in Arizona suggests that we publish "a series of articles descriptive of each hive, with illustrations." Now, we like to receive suggestions, but when any one hints that we begin on the over 900 hives that have been patented in this country, we just feel like "throwing up the sponge."

Let us suggest to our good friend, and to others, just to send for the catalogs of all supply dealers that advertise in the bee-papers, and they will get the descriptions and illustrations of about all the hives that are of any value in this country.

California Laws on Bees.—Mr. Geo. H. Stipp, of San Francisco Co., Calif., wrote us as follows in reference to the statutes relating to bees in that State:

An inspection of the Index to the Laws of California, covering the period from 1853 to 1893, discloses the following named laws only, upon the statute books:

Penalty for keeping bees in San Bernardino Co.—Stats: 1877-8, p. 563.

Act for promotion of culture of bees.—Stats, 1883, p. 285.

Inspectors of bees and duties.—Idem.

I do not think any general laws have been past since 1893, but there may be numerous local ordinances of record in the county or counties to which pertaining.

GEO. H. STIPP.

Importance of the Exchange.—Prof. Cook, of California, who is in an excellent position to judge of the advantages offered by the exchange or co-operation idea among producers, writes us as follows on the subject:

The Southern California Fruit Exchange is becoming more and more popular. Our producers on the farms and in the orchards are coming to see that "co-operation" is the motto of all successful business enterprise. The decline in farm values, and the absence of profits the last few years, might have been avoided, had farmers followed those of all other vocations—even down to the boot-blacks—and acted together.

The Citrus Fruit Exchange has had a struggle. It had to fight the commission men in solid phalanx, and the ignorance, suspicion and short-sightedness in its own ranks. Of course, the Fruit Exchange has made some mistakes. Every new enterprise must do so; but it has saved the fruit industry of Southern California from collapse, has grown steadily in pop-

ularity, and has demonstrated beyond question that co-operation is possible among farmers.

This year the Fruit Exchange has made very substantial progress. There is no doubt but that successful co-operation among all classes of farmers is to come in the near future, and will do more for the prosperity of the country than almost any other one thing. It is good that California can be a light in this respect.

The Bee-Keepers' Exchange here has had but one year, practically, to show its hand. The past season has been so great a honey failure that no work or progress was possible. Last year it made good progress. In all such enterprises it is the main thing—an absolute necessity—to secure a manager who is true, honest, competent, and withal a hustler. I believe we have all of these in Mr. Clayton. It is one of the greatest importance that few or no mistakes be made in this matter. It means more than benefaction to Southern California. Pronounced success will convince other sections, and the entire country will be blest. Let us all help all we can.

A. J. COOK.

We are certainly in great sympathy with the objects and work of the California Bee-Keepers' Exchange, and hold the columns of the old American Bee Journal ever open to its help. We wish it success, and want to do all in our power to make it a winner.

Keep Honey Customers Supplied.—Many bee-keepers this year find that they have not produced enough honey to supply their home demand. And some will think it scarcely worth while to send off for honey and thus furnish their regular customers with it. Right there is where a mistake is made. By all means, get honey elsewhere, if possible, and sell it to your old customers. Of course, they may have to pay you a little more for it than in other years when you had a crop of your own, but they will not object to that, any more than they would object to paying a little more for flour when the price of wheat is higher.

Now, we would say the above even if we had no honey to sell; but we feel that we are doing bee-keepers a good turn when we buy their honey, and then offer to sell it again to other bee-keepers. It helps all around, and we trust that many more of our readers will avail themselves of the opportunity to get honey (as we offer on page 749), and keep their customers supplied all winter, or until another honey harvest comes. One of our readers gets several 60-pound cans every week, and is doing well with it. He puts it into gallon cans, and gets \$1.75 a gallon for it in a city trade. But even at \$1.50 a gallon it wouldn't be bad. Try it.



"TELL ME HIS NAME AGAIN" is the expressive title of a new missionary song—duet and chorus—the music of which was written by Mrs. Mary E. Newlin—a sister of this editor. The words were written by Mrs. A. W. Gruber. It is a beautiful thing for any church missionary service. Send for it and sing it. A single copy is mailed for only 15 cents, two copies for 25 cents, or three or more for 10 cents each. Address, Mrs. Mary E. Newlin, Meadville, Pa.

MR. AND MRS. THOS. WM. COWAN'S GREAT LOSS.—Some two weeks ago we announced the sad news from the British Bee Journal of the loss by shipwreck of a daughter and son of Mr. and Mrs. Cowan. In a later number of that journal the junior editor, Mr. W. B. Carr, gives the following simple facts as they occurred regarding the senior editor's son and daughter on board the ill-fated steamer "Mohegan," which will be read with much interest by all bee-keepers on this side of the Atlantic:

Mr. and Mrs. Cowan had arranged to pay a lengthened visit—accompanied by their only two daughters and second

son—to America, where their eldest son owns a fruit-farm, in which his father is much interested, at Loomis, Calif. The voyagers thus included all the members of Mr. Cowan's family except the youngest son, who is a pupil at the engineering works of the Great Northern Railway, Doncaster. Probably all would have travelled from Liverpool in the Etruria, but the two young people who were passengers on the "Mohegan," being fond of the sea, chose to take the longer voyage from London and meet their parents at Chicago. Mr. Cowan himself having arranged to pay a promised visit to some American and Canadian bee-keepers on his route to that city.

On Thursday, Oct. 13, he saw his children depart on board the "Mohegan" from the Tilbury dock in high spirits and full of happy anticipation of their next meeting at Chicago. It was his intention to join Mrs. Cowan at Doncaster on the following Saturday and spend the intervening few days there with their youngest son referred to above, the latter being the only member of the family thus left in England. But how true is it that "Man proposes but God disposes." Saturday brought news of the loss of the "Mohegan" off the coast of Cornwall, and the day was spent in anxious suspense by all who had relatives or friends on board. At 9:30 p.m. I received at my home a "wire" to say that Mr. Cowan and family had gone from Paddington to the scene of the wreck, and on Monday our worst fears were confirmed. I, of course, at once wrote to Mr. Cowan, but a note from himself crossed mine, in which I learned that the worst had happened, but that he had recovered the bodies of his children, not bruised, as so many were, but placid, as if sleeping peacefully, and he was thankful. I pass over what immediately followed, except to say that they were buried on the 19th inst., at the little village church of Budock, close to the scene of the disaster, the family returning to town the same day.

I saw Mr. and Mrs. Cowan at Hampstead on Thursday and found them full of gratitude for the many letters expressing sympathy with them in their bereavement. Not a few have reached this office conveying similar sentiments, and knowing how greatly Mr. Cowan regards the good wishes of bee-keepers, I ask them to accept, on his behalf, this acknowledgment of their kindness.

In conclusion, and as Mr. and Mrs. Cowan, with their only remaining daughter, are now on the Atlantic on their way to California, where they proceed direct from New York, I hope to be pardoned for quoting a few words from a note to myself, written by Mr. Cowan on board the "Etruria," after leaving Liverpool, and thus conclude. The extract reads thus:

"I can hardly realize that so much has happened since last Saturday, and that everything has been so ordered as not to prevent our joining Alec as soon as possible. When we think of how others are suffering who have not found their friends, or have found them mutilated, how thankful we are that ours were spared all suffering, and that we were able to recover their precious remains so soon. Now we are on the sea, but 'in the hollow of His Hand,' and trust in Him who doeth all things well."

The above words are more characteristic than any I could write of one for whom so many of us feel a love and esteem seldom given to a single individual in this world.

W. BROUGHTON CARR.

MR. A. W. HART, of Stephenson Co., Ill., who called on us a few weeks ago, wrote as follows Nov. 3:

FRIEND YORK—The next morning after my return home my folks got me out at daylight, to take up, whip, clean and put down carpets, etc. "Well, now," I said, "this seems like falling from the sublime to the ridiculous, after being in Chicago midst its beauty, grandeur and glory, and being piloted about its illuminated streets by a sweet lady escort, to now get down to the vulgar duties of a common house-cleaner, in the dust and dirt." O well—

Such things need come into one's life,
If he keeps house, and has a wife
With talent to be clean and neat
Herself, and home keep nice and sweet.

So will her "king," if she's his queen,
Be gallant still, nor be afraid
To be the court(i)er! he has been.
And, cheerful, lend ungrudging aid.

And every nook, with smiling face,
He'll cheerful meet with domestic grace;
If still "he worships her very tracks,"
He'll on his knees—and pull the tacks!

A. W. HART.

We are glad to see that our 69-year-old friend is still a young H(e)art(ed) lover, and makes himself "useful as well as ornamental" around the house. But, then, that's a way most good bee-keepers have.

To Our Regular Subscribers—Now for New Readers!

6 Great 50-cent Offers—Each One Free!!

On this page you will find six splendid premium offers, and we will mail your choice of any one of them for sending us \$1.00 for **just one New subscriber** for 1899—and we will throw in the last three months of this year's Bee Journal free besides to each new subscriber you send on these offers. That makes 15 months of the Bee Journal to the new subscriber. Or, for sending us **4 New subscribers**, as above, we will mail the sender all of the 6 great 50-cent offers.

JUST READ WHAT THEY ARE:

Offer No. 1.—Samantha at Saratoga.

100,000 Sold at \$2.50 per copy.

This is indeed a feast of fun, by the only peer of Mark Twain's humor—**JOSIAH ALLEN'S WIFE** (Marietta Holley.)

Read this Extract from the Book:

And right here, let me insert this one word of wisdom for the special comfort of my sect, and yet it is one that may be laid to heart by the more opposite one. If your pardner gets restless and oneasy and middlin' cross, as pardners will be anon or even oftener—start them off on a tower. A tower will in 9 cases out of 10 lift 'em out of their oneasiness, their restlessness and their crossness.

Why I have known a short tower to Slab City or Loontown act like a charm on my pardner, when crossness wuz in his mean and snappishness was present with him. I have known him to set off with the mean of a lion and come back with the liniment of a lamb.

And jest the prospect of a tower ahead is a great help to a woman in rulin' and keepin' a pardner straight. Somehow jest the thought of a tower sort of lifts him up in mind, and happifys him, and makes him easier to quell, and pardners must be quelled at times, else there would be no livin' with 'em.

She takes off FOLLIES, FLIRTATIONS, LOW-NECKED DRESSING, DUDES, PUG DOGS, TOBOGGANING, ETC.

Opinions of Noted Critics:

"Exceedingly amusing."—Rose E. Cleveland. "Delicious Humor."—Will Carleton. "So exuberantly funny, we had to sit back and laugh until the tears came."—Witness. "Unquestionably her best."—Detroit Free Press. "Bitterest satire, coated with the sweetest of exhilarating fun."—Bishop Newman.

Nicely bound in paper, fully illustrated, printed from new type and on fine paper. 370 pages. Postpaid, 50 cents.

Offer No. 2.—New Waldorf Cook-Book.

Over 1,000 of the very best up-to-date recipes for every conceivable variety required in the kitchen and other departments of house-keeping, by **Mrs. Anne Clarke**, the distinguished student and instructor in culinary science, assisted by many of the most successful house-keepers in various parts of Europe and America. It gives the latest and best methods for economy and luxury at home. Just the book for the housewife or daughter. Has had an enormous sale at \$2.00 a copy. 380 pages; paper bound; postpaid, 50 cents.

Offer No. 3.—Cattle, Sheep and Swine Book.

Fully illustrated—300,000 sold at \$3.00 a copy.

This great work gives all the information concerning the various Breeds and their Characteristics, Breaking, Training, Sheltering, Buying, Selling, Profitable Use, and General Care; embracing all the Diseases to which they are subject—the Causes, How to Know and What to Do given in plain, simple language, but scientifically correct; and with Directions that are Easily Understood, Easily Applied, and Remedies that are within the Reach of the People; giving also the Most Approved and Humane Methods for the Care of Stock, the Prevention of Disease, and Restoration to Health. Written by Dr. Manning.

Every farmer wants this great book. 390 pages, paper bound. Postpaid, 50 cents.

Offer No. 4.—Gleason's Horse-Book.

By Prof. Oscar R. Gleason.

This is the only complete and authorized work by America's king of horse-trainers, renowned throughout America and recognized by the United States Government as the most expert and successful horseman of the age. The whole work comprising His-

tory, Breeding, Training, Breaking, Buying, Feeding, Grooming, Shoeing, Doctoring, Telling Age, and General Care of the Horse. You will know all about a horse after you have read it. No one can fool you on the age of a horse when you have this book. 416 pages, bound in paper, with 173 striking illustrations produced under the direction of the United States Government Veterinary Surgeon. In this book Prof. Gleason has given to the world for the first time his most wonderful methods of training and treating horses. 100,000 sold at \$3.00 each. Our price, postpaid, 50 cents.

Offer No. 5.—Music, \$5 for 50 cents.

Four pieces New Sheet Music, which sell at music stores at 50 cents each—\$2.00; Three years' membership in the World's Musical Association (regular price \$1.00 a year), \$3.00. Total, \$5.00. We offer the whole thing at 50 cents.

The four new pieces of sheet music are the very latest hits of this year; are regular sheet music size and quality, but the title pages are a new style of art, viz: Illuminated Chromatic designs in five brilliant colors.

THE SONG TITLES ARE:

"**Do Your Honey Do**," by THEO. METZ, author of "A Hot time in the Old Town To-night." This latter piece, said to be his best, is creating a great stir, and becoming immensely popular everywhere.

"**Queen of the Bicycle Girls**," by the celebrated composer, OTTO LANGEY, by far the most charming Bicycle Song yet issued.

"**Blossoms from Over the Sea**," by the distinguished composer, J. F. SKELLY, a very beautiful Sentimental Song.

"**He's Just Like All the Men**," by the renowned composer, EASTBURN. Wonderfully pleasing to the Ladies.

The World's Musical Association is an organization having special advantageous relations with the leading music publishers of this country and Europe, and being an enormous purchaser, it is enabled to supply to its members (and will do so) any music desired (at any time within the term of their membership), at such wholesale prices as are usually granted only to very large dealers.

Offer No. 6.—The Poultry-Keeper Illustrators.

The four "Poultry-Keeper Illustrators" are the greatest books on poultry subjects ever issued, and are a veritable poultry dictionary, covering the ground so completely that, having these four books, one needs scarcely anything more except "grit" to become a successful poultry-raiser. You cannot get such other books in the whole world, not even for \$50 each, for they do not exist. Were they given in another form and elaborate binding and colored cuts you might think them easily worth \$5 each, but what you want is not elegant printing, and in these we give you the value in information that you can make use of. They have cost much in labor and cash, but you get all this value for almost nothing. We mail the 4 Illustrators for 50 cents.

Illustrator No. 1.—Poultry Houses Incubators, Brooders, Coops, etc., 25 cents.

Illustrator No. 2.—Artificial Incubation, Raising Chicks, Testing Eggs, etc., 25 cents.

Illustrator No. 3.—Poultry Diseases, Lice, Grapes, Moulting, Egg Eating, etc., 25 cents.

Illustrator No. 4.—Judging Fowls, Description of Breeds, Mating, etc., 25 cents.

Those offers ought to bring us in at least 2,000 new readers during this month and next. You could send in your own renewal for 1899 at the same time you send in a new subscriber, if you wish. If you do, you can select any one of the above offers free for yourself, provided you send at least **two New subscribers** at the same time. That would give you your choice of **three** of the offers—by sending your own renewal for 1899, and two new subscribers (\$3.00 in all).

Address **GEORGE W. YORK & CO., 118 Michigan St., CHICAGO, ILL.**

BEES, HONEY, MONEY

Queens for Business.
Supplies at Bottom Prices.

"Bee-Keeping for Beginners," price 50 cents, imparts the instruction. Price-List free.

J. P. H. BROWN, Augusta, Ga.

Please mention Bee Journal when writing.



HATCH CHICKENS
BY STEAM—with the simple, perfect, self-regulating
EXCELSIOR INCUBATOR
Thousands in successful operation.
Lowest priced 1st-class hatcher made.
GEO. H. STABLE,
114 to 122 S. 6th St., Quincy, Ill.

44A26t Please mention the Bee Journal.



SEE THAT WINK!

Bee - Supplies! Root's
Goods at Root's Prices.

Powder's Honey - Jars,
and every thing used by
bee-keepers. Prompt ser-
vice, low freight rate. Cat-
free. Walter S. Powder,

512 Mass. Ave.,
INDIANAPOLIS, INDIANA.

Please mention Bee Journal when writing.

BEE-KEEPERS! Let me send you my 64-
page Catalog for 1898
J. M. Jenkins, Wetumpka, Ala.

Please mention Bee Journal when writing.



This Emerson stiff-cloth-board Binder for the American Bee Journal we mail for 60 cents; or will send it with the Journal for one year—both for \$1.50. It is a very fine thing to preserve the copies of the Bee Journal as fast as they are received. If you have the "Emerson," no further binding is necessary.

GEORGE W. YORK & CO.,

118 Michigan Street, - CHICAGO, ILL.

PATENT WIRED COMB FOUNDATION

Has No Sag in Brood-Frames

Thin Flat-Bottom Foundation

Has No Fishbone in the Surplus Honey.

Being the cleanest is usually worked the quickest of any Foundation made

J. A. VAN DEUSEN,

Sole Manufacturer,
Sprout Brook Montgomery Co., N. Y.

The A. I. Root Co.'s Goods Wholesale. Retail.

Including their discounts for Goods wanted for use another season. It will pay you to send me list of Goods wanted. M. H. HUNT
Cash for Beeswax. BELL BRANCH, MICH.
Please mention Bee Journal when writing.

GENERAL ITEMS

Member of Waterleaf Family.

I send a plant that I may learn the name thereof. It is the first or among the first things in bloom in this section, and bees seem very fond of it, remaining with it throughout the day. It grows along marshy lands, and along the foothills near them. Bees build up rapidly in early spring when located near it, so it must secrete nectar profusely. W. I. COPELAND, M. D.
Polk Co., Tenn., Nov. 8.

[The plant belongs to the order, Hydrophyllaceae, or waterleaf family; species, Phacelia purshii. Its limits are Pennsylvania west to the Mississippi river, and south to Alabama. The flowering season is April to June. The order to which it belongs is small, but has mark nectariferous properties, as some of the species (not this one) are provided with nectariferous grooves to facilitate the extraction of the juice by the bee.—EDITOR.]

The Langstroth Monument Fund.

EDITOR YORK:—I send two dollars, one of which is to renew my allegiance to the United States Bee-Keepers' Union, and the other to go into the fund for the erection of a monument to Mr. Langstroth.

It seems a little singular that after the great benefit that has accrued to the bee-keepers of this country through the ingenuity and perseverance of Mr. Langstroth, there should be so much apathy displayed by them in regard to this matter, and I am inclined to the belief that there are many hundreds of them, who, like myself, have been a little careless or negligent about it, but who, ever since the subject was first brought to their notice, have been intending to contribute their mite. There is an old saying, that what can be done at any time never gets done, but I hope there will be exceptions enough to this rule to provide a sufficient sum to erect a suitable monument to the memory of him who did so much for the bee-keepers of this country.

DAVID HALL.

Wyoming Co., N. Y., Nov. 2.

Rather Discouraging Report.

Last fall I put 14 colonies of bees into the cellar, and with three swarms this summer made 17. Before taking out of the cellar, three colonies starved; two of the new swarms arose and bade me good-bye, thinking they could find a better country. Two colonies the moths took possession of, and the rest were robbed of honey, bees, and all by stronger colonies; and I now have four colonies left, three being good for the winter, and one must be fed to winter at all. You may lay some of it to me, but, as the boy said, "I am not guilty of it all." I took 60 pounds of honey, and the bees had the rest. There will be less bees in Minnesota next spring than there are now. My bees are blacks. The Italians get honey from red clover, and the blacks cannot.

J. V. B. HERRICK.

Hennepin Co., Minn., Nov. 15.

A Very Dry Spell.

We are having a very dry spell, no rain having fallen for quite a while, and north winds have about dried up all the moisture there was in the ground. We had early rains and for a time everything looked favorable for a fine season. The new grass soon grew sufficiently for the hills to be again decked in verdure; but they are now almost as brown as they would be in July or August, when California is a dry country indeed. This is the time for seasonable rains; farmers and others rush their plowing at this season. Where grain has been sown and started it is getting a bad set-

Sweet Clover

And Several Other Clover Seeds.

We have made arrangements so that we can furnish seed of several of the Clovers by freight or express, at the following prices, cash with order:

	5lb	10lb	25lb	50lb
Sweet Clover	.80	\$1.00	\$2.25	\$4.00
Alaska Clover	.70	1.25	3.00	5.75
White Clover	.80	1.40	3.00	5.00
Alfalfa Clover	.60	1.00	2.25	4.00
Crimson Clover	.55	.90	2.00	3.50

Prices subject to market changes.

Add 25 cents to your order, for cartage, wanted by freight.

Your orders are solicited.

GEO. W. YORK & CO., 118 Mich. St., Chicago.



ONE MAN WITH THE UNION COMBINATION SAW

Can do the work of four men using hand tools, in Ripping, Cutting-off, Milling, Rabbeting, Grooving, Gaining, Dadoing, Edging-up, Jointing Stuff, etc. Full Line of Foot and Hand Power Machinery Held on Trial. Catalogue Free.

SENECA FALLS MFG. CO.,
46 Water St. SENECA FALLS, N. Y.

You Can Learn Shorthand at Home

by our perfected method of giving lessons by mail. Easiest, simplest system. Send stamp for particulars.

Eclectic Shorthand College,

94 Dearborn Street, CHICAGO.

39Ayl

D. F. HAYMES, Manager.



Buy Your Sections Now

while we offer them at a **LARGE DISCOUNT**, having added to our plant one of the most complete one-piece section machines, enabling us to turn out the most beautiful sections on the market. By sending us a list of Supplies wanted we can save you \$\$\$.

H. H. SCHMIDT & CO., Box 187, SHEBOYGAN, WIS.

Please mention Bee Journal when writing.

FREE FOR A MONTH.

If you are interested in sheep in any way you cannot afford to be without the best and only weekly sheep paper published in the United States.

WOOL MARKETS AND SHEEP

has a hobby which is the sheep breeder and his industry, first foremost and all the time. Are you interested? Write to-day.

Wool Markets & Sheep, - - Chicago.

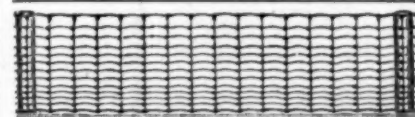
COMB FOUNDATION Wholesale and Retail.

Working Wax into Foundation for CASH A Specialty.

Hives, Sections, and a full line of Supplies. The best of everything. Write for Catalog, with prices, and samples of Foundation and Sections.

BEESWAX always wanted for cash or trade.

GUS DITTMER,
AUGUSTA, WIS.



Don't Shovel Snow

all winter from the lane, but buy Page Fence and have a clear track. No drifts behind our Winter Styles. Ask for prices.

Page Woven Wire Fence Co., Adrian, Mich.

A GREAT ***** COMBINATION OFFER

COOK'S "BEE-KEEPERS' GUIDE"
FOR ONLY FIFTY CENTS.

You ought to have a good bee-book, if you haven't one already. Prof. A. J. Cook's Manual, or "Bee-Keepers' Guide," is one of the very best published to-day. It is bound substantially and neatly in cloth, contains over 450 pages, and retails at \$1.25 a copy, postpaid. But we are going to make you an offer, for the next **three weeks** (positively ending Dec. 10), that will open your eyes. Here it is:

☐ To every subscriber who before Dec. 10 will pay his subscription to the American Bee Journal to the end of next year (1899) we will mail a copy of Prof. Cook's "Bee-Keepers' Guide" for only 50 cents extra. That is really getting a dollar-and-a-quarter bee-book for only 50 cents. Can you afford to miss such a chance as that?

Address,

GEORGE W. YORK & CO., 118 Michigan St., Chicago, Ill.



colored transparent Foundation, Improved Smokers and Honey Extractors, and all other first-class goods, are what we sell. Kind and courteous treatment and honorable dealing our motto. On these bases, we solicit an order, feeling sure that if we sell you one bill of goods you will be our customer in the future.

PROGRESSIVE BEE-KEEPER, 50c per year. "Amateur Bee-Keeper," 25c. Both for 65c. postpaid. Sample copy of the PROGRESSIVE free, and a beautiful Catalog for the asking.

Address, **Leahy Manufacturing Company, Higginsville, Mo., or**
1730 South 13th St., Omaha, Neb.

Please mention Bee Journal when writing.

Ho, for Omaha!

As we have many customers in the Northwest, and believing they will appreciate the low freight rates obtained by purchasing goods from a railroad center nearer to them than we are, getting a direct through-freight rate, thus cutting the freight in half, we have established a branch house at 1730 South 13th St., Omaha, Neb., where we will keep a complete line of all Apian Supplies, the same as we do at Higginsville, Mo. With the quality of our goods, we believe most bee-keepers in the West are already acquainted, but to those who are not, we will say that our goods are par excellence. Polished, snowy-white Sections, beautiful straw-

colored transparent Foundation, Improved Smokers and Honey Extractors, and all other first-class goods, are what we sell. Kind and courteous treatment and honorable dealing our motto. On these bases, we solicit an order, feeling sure that if we sell you one bill of goods you will be our customer in the future.

PROGRESSIVE BEE-KEEPER, 50c per year. "Amateur Bee-Keeper," 25c. Both for 65c. postpaid. Sample copy of the PROGRESSIVE free, and a beautiful Catalog for the asking.

Address, **Leahy Manufacturing Company, Higginsville, Mo., or**
1730 South 13th St., Omaha, Neb.

Please mention Bee Journal when writing.

26c Cash Paid for Beeswax.

This is a good time to send in your Beeswax. We are paying **26 cents a pound — CASH** — upon its receipt. Now, if you want the money PROMPTLY, send us your Beeswax. Impure wax not taken at any price. Address as follows, very plainly.

GEORGE W. YORK & CO.,
118 Michigan Street, CHICAGO, ILL.



SAVE MONEY AND FEED BY BUYING AND USING OUR

It is low priced, not cheap. Made from the best of cast gray iron with 14 oz. galvanized steel boiler to hold 20 gals. Just the thing for cooking feed for stock, pigs or poultry and heat water for scalding hogs. **Reliable Stock Food Cookers** are good but of much larger capacity. 25 to 100 gals. We will be glad to quote prices on inquiry. Do not buy until you get our free descriptive circulars. Better write for them at once.

RELIABLE INCUBATOR AND BROODER CO.
Box B2, Quincy, Illinois.

Please mention Bee Journal when writing.

**\$5.00
FARMER'S
FEED
COOKERS**

Page & Lyon Mfg. Co. New London, — Wisconsin,

Operates two sawmills that cut, annually, eight million feet of lumber, thus securing the best lumber at the lowest price for the manufacture of

Bee-Keepers' Supplies.

They have also one **One of the Largest Factories** and the latest and most-improved machinery for the manufacture of

Bee-Hives, Sections, Etc.,

that there is in the State. The material is cut from patterns, by machinery, and is absolutely accurate. For Sections, the **clearest and whitest Basswood** is used, and they are polished on both sides. Nearness to Pine and Basswood forests, and possession of mills and factory equip't with best machinery, all combine to enable this firm to furnish the

Best Goods at the Lowest Prices.

Send for Circular and see the Prices on a Full Line of Supplies.

Please mention the American Bee Journal.

7Atf

back, so much so that in places it is dying out. If it continues, the price of butter, hay, grain and other rural products will advance very materially. Those apiarists who are holding on to their honey will be apt to get a good price. There seems to be no reason why extracted honey should not go up to 7 cents and over. Some bee-keepers are already getting an advanced price for their honey. Mr. J. H. Martin writes me from the northern part of the State that he obtained 6 cents for his honey. It was shipped to the San Francisco market. This is ahead of what honey brought last year by double.

You may judge how bad the outlook is for rain when I state that prayers are being offered up in the churches for seasonable rain.

W. A. PRYAL.
Alameda Co., Calif., Nov. 14.

Tin vs. Wood for Honey.

The editorial on page 713 gives only one side of this matter. I wax all my barrels with paraffine at an expense of 10 cents each or less. This prevents soaking of honey into the barrel, of which is given an extreme case, as also all danger of flavoring the honey with any wood flavor the barrel might give.

The objection to tin cans, with us at least, who live so far from the general market, is the extra cost. The greater expense of tin, as well as the extra freight on honey in cans over honey in barrels, is very nearly or quite one cent a pound; while the increase price we may obtain for it may be one-fourth cent a pound. The question with us down here is simply one of dollars and cents, and barrels seem to have a decided advantage.

O. O. POPPLETON.

Dade Co., Fla., Nov. 14.

Very Good Season for Bees.

It has been a very good season here for bees this year. I got 1,000 pounds from my apiary, and have sold \$180 worth of honey. I got 12 cents a pound at our station. I don't know whether that is as well as other bee-keepers have done with their honey, but as to market reports, I think it will average with them. I have 65 colonies of bees which are in good condition for winter.

G. H. ADKINS.

Essex Co., N. Y., Nov. 14.

Honey Crop a Failure.

The honey crop is a failure here, but some colonies that I moved to the moist sunflower lands have filled up and are in excellent condition for winter; and if I had known the benefit to be derived from moving I should certainly have moved all I had; and I think if they had been moved early I could have extracted at least once, and they would also have filled up so as to winter in good condition.

L. L. ANDREWS.

Riverside Co., Calif., Nov. 7.

Does Chilling Injure a Queen?

Early in the past summer, I had a colony, started from a nucleus, which did not thrive, notwithstanding I had coaxed it by every means I knew, during the winter and spring. It had dwindled to a handful of bees, but as the queen was Italian and the producer of fine looking bees, I did not like to lose her, altho she seemed to be quite unproductive. I, therefore, placed in the hive several sheets of brood and adhering bees from a strong colony. Immediately there was a big battle. I concluded it would be best to look out for my queen and save her if possible, but could not find her anywhere. As she was clipped, she could not fly away, so I closed the hive reluctantly to await results.

Late in the afternoon, I went to the hive and there discovered my cherished queen on the flat of her back on the ground and dead (?). I took her to the house to show my brother-in-law and, as he held her in his

BABY BEEF AND PIG PORK

the kind that never stops growing a minute and which matures at an early age, is the kind that produces the greatest percentage of profit. This problem of quick maturity is solved by

The Electric Feed Cookers.

They cook all kinds of stock food, ground or unground, quickly, thoroughly and cheaply. Because of their peculiar construction they require less fuel than any cooker made. They have a dead-air space between the inner and outer plates, which conserves the heat, and thus they

REQUIRE LESS FUEL AND RETAIN THE HEAT LONGER.

Made of best gray iron castings and lined with plates of steel. Boilers of best galvanized steel. Three styles, five sizes—25 to 100 gallons. Free book on "Feed Cooking" sent to all interested parties on application.

ELECTRIC WHEEL CO., Box 16, Quincy, Illinois.

Please mention Bee Journal when writing.

HONEY * FOR * SALE.

Best White Alfalfa Extracted...

ALL IN 60-POUND TIN CANS.

This is the famous white extracted honey gathered in the great Alfalfa regions of the Central West. It is a splendid honey, and nearly everybody who cares to eat honey at all can hardly get enough of the Alfalfa extracted.

Prices are as Follows:

A sample by mail, 8 cents in stamps, to pay for package and postage. By freight—One 60-pound can, 8 cents per pound; 2 cans, 7½ cents per pound; 4 or more cans, 7¼ cents per pound. Cash must accompany each order.

This honey is **ABSOLUTELY PURE BEES' HONEY**, the finest of the kind produced in this country.

We would suggest that those bee-keepers who did not produce any honey for their home demand the past season, just order some of the above, and sell it. And others, who want to earn some money, can get this honey and work up a demand for it almost anywhere. The Circular, "HONEY AS FOOD," will be a great help in creating customers for honey. Address,

GEORGE W. YORK & CO., 118 Michigan St., Chicago, Ill.



HIGH-GRADE INCUBATORS
WE CAN SUIT YOU IN PRICE AND WE GUARANTEE TO PLEASE YOU IN QUALITY. What more could we do? Our catalogue tells all, and is devoted largely to practical matters pertaining to poultry raising. Has 148 pages; mailed to any address for 6c. No wild and woolly statements, toy outfits, nor prize package lots to offer. Fair treatment, prompt service and full value are what we try to give our customers.
DES MOINES INCUBATOR CO. Box 78, Des Moines, Iowa.

Please mention Bee Journal when writing.

We want

EVERY BEE-KEEPER

.....To have a copy of.....

Our 1898 Catalog

Send us your name and address and we will take pleasure in mailing you a copy!

G. B. LEWIS CO., WATERTOWN, WIS.

Special Agent for the Southwest—

E. T. ABBOTT, St. Joseph, Mo.

Mr. Abbott sells our Hives and Sections at factory prices.

Please mention the Bee Journal when writing Advertisers.

warm palm, she slightly moved a leg. By blowing his breath upon her, she livened up and kickt some more. I told him to nurse her and see if she would not revive, while I went to prepare a cage. In a little time she was crawling all over his hand. I then put her in the cage, stopt up with candy, and placed her in the top of the hive. In a few days she was out and as contented as tho nothing had befallen her. She now has a large and growing family and plenty of brood.

This seems to combat the idea that chilling of the queen destroys or impairs her laying qualities.

GEO. H. STIPP.
San Francisco Co., Calif., Nov. 10.

Very Poor Season.

Bees did very poorly here the past season. I have about 800 pounds of honey from 55 colonies. All seem to have plenty to carry them through the winter. We live in hopes for a better season next year.

WILLIAM M. DICK.
Ford Co., Ill., Nov. 10.

Bees Did Well.

Bees came through last winter better than ever before. I had 9 colonies, spring count, increast to 17, all strong with the exception of one. Some colonies stored 50 to 60 pounds of surplus honey; others very little. Take it throughout the county, bees have done very well.

My honey has been of first-class quality, and I had no trouble in selling it in the home market.

I use 8-frame dovetailed hives, but prefer the 10-frame, and will put my new swarms into them another year.

WILL HOWE.
Saginaw Co., Mich., Nov. 10.

One of the Asters.

I send a sample of a flower that blooms here. It is a newcomer, first making its appearance three years ago. It is a great bloomer, beginning about Sept. 25, and continues to bloom up to about Oct. 25. Some will bloom later. Some of it is in bloom here now, but I speak of the full or general blooming period. Our hives filled right up when it was in bloom, and if it had not been for it we would have had to feed considerable. This has been a very poor honey season here, up to the time of the bloom of the flower I send you—a regular honey-drouth.

FRANK P. COOK.
Wetzel Co., W. Va., Nov. 4.

[The flower belongs to the Composite family; species, *aster ericoides*; variety, *villosus*. All the asters seem to have a fine record as nectar-yielders.—EDITOR.]

No Surplus—Queens and Premiums.

We had a fine crop of white clover, also a fine crop of alsike, but not a pound of surplus honey did we get. This fall we had a good crop of yellow flowers called Spanish-needle, but were not that; also a large crop of smartweed, yet not one pound of honey for me. The most of the colonies have enough to winter on, but there are a few weak ones that I will have to feed. The Ruler of the universe withheld the nectar from the flowers, so then of course the bees could not get it. My bees workt hard, and it seemed to make them angry because they could not get the honey; they were crosser at one time than I ever saw them before, but they have given it up now as a bad job, and concluded that it was not worth while to make a fuss about it.

I saw in the Bee Journal that Mr. Grabbe has suggested some good ideas in not offering premiums on Albino, Cyprian and Holy Land bees. I think very few people are breeding them in this country, and I don't know whether the Carniolans are any better.

I sent this season to a Texas queen-breeder for two queens, one golden Italian and one Carniolan. The golden Italian I wanted to change my stock, so as not to

BEE-BOOKS

SENT POSTPAID BY

George W. York & Co.,

Chicago, Ills.

Bees and Honey, or Management of an Apiary for Pleasure and Profit. by Thomas G. Newman.—This edition has been largely re-written, thoroughly revised, and is "fully up with the times" in all the improvements and inventions in this rapidly-developing pursuit, and presents the apiarist with everything that can aid in the successful management of an apiary, and at the same time produce the most honey in an attractive condition. It contains 250 pages, and 245 illustrations—is beautifully printed in the highest style of the art, and bound in cloth, gold-lettered. Price, \$1.00.

Langstroth on the Honey-Bee, revised by Dadant.—This classic in bee-culture, has been entirely re-written, and is fully illustrated. It treats of everything relating to bees and bee-keeping. No apiarian library is complete without this standard work by Rev. L. L. Langstroth—the father of American Bee-Culture. It has 520 pages; bound in cloth.

Price, postpaid, \$1.25.]

Bee-Keepers' Guide, or Manual of the Apiary, by Prof. A. J. Cook, of the Michigan Agricultural College.—This book is not only instructive and helpful as a guide in bee-keeping, but is interesting and thoroughly practical and scientific. It contains a full delineation of the anatomy and physiology of bees. 460 pages; bound in cloth and fully illustrated.

Price, postpaid, \$1.25.

Scientific Queen-Rearing, as Practically Applied, by G. M. Doolittle.—A method by which the very best of Queen-Bees are reared in perfect accord with Nature's way. 176 pages, bound in cloth, and illustrated. Price, \$1.00.

A B C of Bee-Culture, by A. I. Root.—A cyclopedia of 400 pages, describing everything pertaining to the care of the honey-bees. It contains 300 engravings. It was written especially for beginners. Bound in cloth. Price, \$1.25.

Advanced Bee-Culture, Its Methods and Management, by W. Z. Hutchinson.—The author of this work is too well known to need further description of his book. He is a practical and entertaining writer. You should read his book. 90 pages, bound in paper, and illustrated. Price, 50 cts.

Rational Bee-Keeping, by Dr. John Dzierzon.—This is a translation of his latest German book on bee-culture. It has 350 pages; bound in paper covers, \$1.00.

Bienen-Kultur, by Thomas G. Newman.—This is a German translation of the principal portion of the book called **BEES OF HONEY**. 10 page pamphlet. Price, 40 cents.

Bienenzucht und Honiggewinnung, nach der neuesten methode (German) by J. F. Eggers.—This book gives the latest, most approved methods of bee-keeping in an easy, comprehensive style, with illustrations to suit the subject. 50 pages, board cover. Price, 50c.

Bee-Keeping for Beginners, by Dr. J. P. H. Brown, of Georgia. A practical and condensed treatise on the honey-bee, giving the best modes of management in order to secure the most profit. 110 pages, bound in paper. Price, 50 cents.

Bee-Keeping for Profit, by Dr. G. L. Tinker.—Revised and enlarged. It details the author's "new system, or how to get the largest yields of comb or extracted honey." 80 p., illustrated. 25c.

Convention Hand-Book, for Bee-Keepers, by Thomas G. Newman.—It contains the parliamentary law and rules of order for Bee-Conventions—also Constitution and By-Laws, with subjects for discussion, etc. Cloth, gold-lettered. Price, 25 cts.

Practical Hints to Bee-Keepers—by CHAS. F. MUTH. Also contains a Foul Brood Cure and How to Winter Bees. 40 p.; 10 cts.

Apiary Register, by Thos. G. Newman.—Devotes two pages to a colony. Leather binding. Price, for 50 colonies, \$1.00; for 100 colonies, \$1.25.

Preparation of Honey for the Market, including the production and care of comb and extracted honey. A chapter from **BEES AND HONEY**. Price, 10 cents.

Bee-Pasturage a Necessity.—This book suggests what and how to plant. It is a chapter from **BEES AND HONEY**. Price, 10 cents.

Dr. Howard's Book on Foul Brood.—Gives the McEvoy Treatment and reviews the experiments of others. Price, 25 cts.

Winter Problem in Bee-Keeping, by G. R. Pierce. Result of 25 years' experience. 30 cts.

Foul Brood Treatment, by Prof. F. R. Cheshire.—Its Cause and Prevention. Price, 10 cts.

Foul Brood, by A. R. Kohnke.—Origin, Development and Cure. Price 10 cts.

Hand-Book of Health, by Dr. Foote.—Hints about eating, drinking, etc. Price, 25 cts.

Honey as Food is a neat little 24-page pamphlet especially gotten up with a view to creating a demand for honey among should-be consumers. The forepart of the pamphlet was written by Dr. C. C. Miller, and is devoted to general information concerning honey. The latter part consists of recipes for use in cooking and as a medicine. It will be found to be a very effective helper in working up a home market for honey. We furnish them, postpaid, at these prices: A sample for a stamp; 25 copies for 30 cents; 50 for 50 cents; 100 for 80 cents; 250 for \$2.00; 500 for \$3.50. For 25 cents extra we will print your name and address on the front page, when ordering 100 or more copies at these prices.

Commercial Calculator, by C. Ropp.—A ready Calculator, Business Arithmetic and Account-Book combined in one. Every farmer and business man should have it. No. 1, bound in water proof leatherette, calf finish. Price, 40 cts. No. 2, in fine artificial leather, with pocket, silicate slate, and account-book. Price, 60 cts.

Green's Four Books, by Chas. A. Green.—Devoted to, 1st, How We Made the Old Farm Pay; 2nd, Peach Culture; 3rd, How to Propagate Fruit-Plants, Vines and Trees; 4th, General Fruit Instructor. Nearly 120 pages. Fully illustrated. 25 cts.

Garden and Orchard, by Chas. A. Green.—Gives full instructions in Thinning and Marketing Fruits; Pruning, Planting and Cultivating; Spraying, Evaporation, Cold Storage, Etc. 64 pages, illustrated. Price, 25 cts.

The Hive I Use, by G. M. Doolittle. It details his management of bees, and methods of producing comb honey. Price, 5 cents.

Kendall's Horse-Book.—35 pictures, showing positions of sick horses, and treats on all their diseases. English or German. Price, 25 cts.

Silo and Silage, by Prof. A. J. Cook.—It gives the method in operation at the Michigan Agricultural College. Price, 25 cts.

Lumber and Log-Book.—Gives measurements of lumber, logs, planks; wages, etc. 25c.

Maple Sugar and the Sugar Bush, by Prof. A. J. Cook.—Full instructions. Price, 35 cts.

Grain Tables, for casting up the price of grain, produce, hay, etc. Price, 25 cts.

Capons and Caponizing, by Dr. Sawyer, Fanny Field, and others.—Illustrated. All about caponing fowls, and thus how to make the most money in poultry-raising. 64 pages. Price, 30 cts.

Our Poultry Doctor, or Health in the Poultry Yard and How to Cure Sick Fowls, by Fanny Field.—Everything about Poultry Diseases and their Cures. 64 pages. Price, 30 cts.

Poultry for Market and Poultry for Profit, by Fanny Field.—Tells everything about the Poultry Business. 64 pages. Price, 25 cts.

Rural Life.—Bees, Poultry, Fruits, Vegetables, and Household Matters. 100 pages. 25 cts.

Potato Culture, by T. B. Terry.—It tells how to grow them profitably. Price, 40 cts.

Book Clubbing Offers.

(Read Carefully.)

The following clubbing prices include the American Bee Journal one year with each book named. Remember, that only ONE book can be taken in each case with the Bee Journal a year at the prices named. If more books are wanted, see postpaid prices given with the description of the books on this page. Following is the clubbing-list:

1. Langstroth on the Honey-Bee.....	\$2.00
2. A B C of Bee-Culture.....	2.00
3. Bee-Keepers' Guide.....	1.75
4. Bees and Honey [Cloth bound].....	1.65
5. Doolittle's Scientific Queen-Rearing.....	1.75
6. Dr. Howard's Foul Brood Book.....	1.10
7. Advanced Bee-Culture.....	1.30
8. Bienen-Kultur [German].....	1.20
11. Rational Bee-Keeping [Paper bound].....	1.75
13. Bee-Keeping for Profit.....	1.15
14. Convention Hand-Book.....	1.15
15. Poultry for Market and Profit.....	1.10
17. Capons and Caponizing.....	1.10
18. Our Poultry Doctor.....	1.10
19. Green's Four Books.....	1.15
21. Garden and Orchard.....	1.15
23. Rural Life.....	1.10
25. Commercial Calculator, No. 1.....	1.25
26. Commercial Calculator, No. 2.....	1.40
27. Kendall's Horse-Book.....	1.10
30. Potato Culture.....	1.20
32. Hand-Book of Health.....	1.10
34. Maple Sugar and the Sugar Bush.....	1.20
35. Silo and Silage.....	1.10
36. Winter Problem in Bee-Keeping.....	1.30
37. Apiary Register (for 50 colonies).....	1.75
38. Apiary Register (for 100 colonies).....	2.00

breed in and in, not that I expected to get any better or yellow bees, but to change or improve the stock. The Carniolan I thought I might take to the State Fair, but not so. The golden queen bred poor 3-banded bees; the so-called Carniolan breeds bees just like 3-quarter blacks; a good many have one yellow band, the rest none.

I had two queens that were wrongly mated the past season, and their offspring were very much like the so-called Carniolan, the only difference being that my queens bred more yellow-banded bees than the Texas one did, but the bees that had no yellow on them had just as white rings as the others.

I had a queen from Texas a few years ago that bred as fine bees as one generally sees, but it was from a different breeder. I will not name any breeder, but if the one that I got the two queens from the past season sends out such queens for purely-mated queens, he surely will kill his reputation, if he has any. The guilty conscience needs no accuser.

I was not at the State Fair this fall, as my wife is in poor health, and it did not suit for me to leave home very well; and the premiums offered on bees and queens did not please me. It required too many kinds of bees and queens; I don't care to keep all these varieties of bees, and to send off and get them to make a display, it would cost more than it would amount to. I hope there will be some change between now and next season.

THOMAS S. WALLACE.

Adams Co., Ill., Oct. 17.

Ridding the Apiary of Ants.

I think I have solved successfully the problem of getting rid of ants in the apiary and here it is:

Shake a goodly supply of air-slack lime around the hives, only, of course, keep it off the alighting-board, and if ants are under the cover, or in the supers, lift the cover and sprinkle along the edge of the super, inside. Of course, if it should rain the following night, the lime will harden and do no good, and you would have to apply again as soon as dry, for it is by the crawling through the fine, dry lime that the ants so much dislike. This will keep the yard sweet and free from bugs and ants, and costs but a trifle.

My bees did fairly well the past summer, producing about 70 pounds of comb honey a colony, spring count. J. H. TICHENOR.

Crawford Co., Wis., Oct. 29.

Honey-Dew.

Much has been published of late on this subject, and while no one praises it as being first-class honey, some think it as fair to middling, while others say it is worthless, or nearly so. But this depends on its source of production; with us it is produced almost entirely by the Aphidæ family. When it is secreted by the white or green aphids a certain percent of it will pass, but when it is produced by the yellow, brown, or black aphids the most of it is practically worthless. I have been accused of calling this stuff "bug-juice;" it is known by that name here.

It is claimed by some that it falls as a real dew; this is a mistake. One person recently wrote that he found it on the poplar leaves, but said there were no insects on them at the time; but he did not tell us that they never had been on them. The eggs are often laid on the leaf or stem. After they hatch, the small insect crawls over the leaf, sucking the sap from it and leaving a sticky substance in its trail. In some varieties, if examined by a microscope, nearly the entire body looks like small particles of honey, or honey-dew.

I enclose samples of the green and brown aphids on the apple and poplar; also sample of a dark variety on the willow leaf; they are alive now, but they may not be when received. I send also samples of sucking insects—the woolly aphids and scale. They work on the bark, and are injurious to the life of the tree. These insects and the

coddling-moth have caused much loss to bee-keepers through the useless practice of spraying trees, vines, etc., while in bloom. Sometimes the secretions of these insects will partly dry on the leaves; then if there is a light, drizzling rain or a heavy dew, it becomes softened. In any case there can be no such thing as a real honey-dew. We can account for storms of ashes, dust, salt, etc., because they are taken up and again deposited by natural cause. Could it be possible for such a thing as real honey-dew falling? Would it not be like the other storms referred to—cover other space or surface as well as leaves? So far, we have not been troubled with this honey-dew question here, as far as the bees are concerned. I investigated the insect question to some extent while the blossom-spraying excitement continued, and, like other things, it is simple when known or understood.

E. S. LOVESY.

Salt Lake Co., Utah, Nov. 4.

Transferring—Getting Bees in Supers.

I had a little experience in transferring, this year, that pleased me some. I purchased a few colonies this season that were in hives that had very crooked combs. I simply put under them hives with frames and starters, and in about six weeks found them moved down below on nice combs, with plenty of brood, and the top story full of honey. I then put a Porter escape under the top story, and a day or two after I took it off, and put the combs into the solar extractor, and had my bees in a new hive on nice combs. Whether this plan will work at all times or not I do not know, but so far it has worked all right with me.

I had some trouble the past season with swarms not working in the supers, and I separated the brood-chambers (I use the Heddon hive with two brood-chambers) and put another in between (tiered them, rather) with frames and starters; they then went to work in the brood-chamber with the frames and starters in, and filled the upper story with honey, and I worked them for extracted and they did very well for this poor year.

W. W. WHIPPLE.

Arapahoe Co., Colo.

New York.—The tenth annual meeting of the Ontario Co., N. Y., Bee-Keepers' Association will be held in Canandaigua, N. Y., Dec. 8 and 9, 1898. An interesting program is in course of preparation. All interested in bees or bee-keeping are invited to attend.

Bellona, N. Y. RUTH E. TAYLOR, Sec.

Colorado.—The Colorado State Bee Keepers' Association will hold their annual convention Nov. 30 and Dec. 1 and 2, 1898, in the State Capitol Building, Denver. The Horticulturists meet Nov. 28, 29 and 30, our first day being their last. This arrangement will give members of both a chance to attend the other's meeting and discuss common interests.

H. C. ATKIN, Pres., Loveland, Col.
F. KAUFHUS, Sec., Elyria, Col.

Ontario.—The annual meeting of the Ontario Bee-Keepers' Association will be held in Guelph, Dec. 6, 7 and 8, 1898. Owing to the Guelph Fat Stock Show, the Guelph Poultry and Pet Stock Show, and the Experimental Union meeting on the same dates, there will be a large meeting of bee-keepers, and each association will be a help to the other, as many are interested in all the different meetings. All are cordially invited to attend the meetings.

W. COUSE, Sec.

Streetville, Ont.

FARM BEE-KEEPING

Is one of the leading departments in the **Modern Farmer and Busy Bee**, the best general **FARM and BEE** paper in existence. Write for sample copy to-day, and for clubbing rates with any paper you want.

Address,

Emerson T. Abbott, St. Joseph, Mo.

A LOW CLUBBING RATE:

Send \$1.50 to the American Bee Journal office, and get both the **Modern Farmer** and the **Bee Journal** for a year. G. W. Y. & CO.

A Special Booklet Bargain!

For a limited time we wish to make our readers a special offer on booklets on Bees, Poultry, Health, etc. Upon receipt of 75 cents we will mail any 6 of the list below; and for \$1.25 we will mail the whole dozen.

1. Foul Brood, by Dr. Howard..... 25c
2. Poultry for Market and Profit..... 25c
3. Turkeys for Market and Profit..... 25c
4. Our Poultry Doctor..... 30c
5. Capons and Caponizing..... 30c
6. Hand-Book of Health, by Dr. Foote..... 25c
7. Kendall's Horse-Book..... 25c
8. Rural Life..... 25c
9. Kopp's Commercial Calculator..... 25c
10. Foul Brood, by Kohnke..... 10c
11. Silo and Silage, by Prof Cook..... 25c
12. Bienen-Kultur, by Newman..... 40c

GEO. W. YORK & CO.

118 Michigan st., CHICAGO, ILL.

—THIS—

Wood Binder

will hold one year's numbers of the AMERICAN BEE JOURNAL and will be sent by mail for 20 cents. Full directions accompany each Binder. The issues of the JOURNAL can be inserted as soon as they are read, and preserved for reference in book form.

By paying for a year's subscription STRICTLY IN ADVANCE this Binder will be sent, post-paid, for 10 cents extra.

ADDRESS,
GEO. W. YORK & CO.
118 Mich. St., Chicago, Ill.

Important Change in Time on Nickel Plate Road.

Commencing Sunday, Nov. 13, the New York and Boston Express will leave Chicago daily at 10:20 a.m., instead of 10:35 a.m., as formerly. Other trains will leave daily at 2:55 p.m. and 10:15 p.m., as heretofore. The same high standard of through train service and excellent equipment will be maintained, as in the past. No extra fares will be charged on any train. Rates always the lowest. Sleeping-car space may be received for any future date. Chicago Passenger Station, Van Buren St. and Pacific Ave., on the Loop. City ticket office, 111 Adams St. Telephone Main 3389. (47-1-76)



Queen-Clipping Device Free

The Monette Queen-Clipping device is a fine thing for use in catching and clipping queens' wings. We mail it for 25 cents; or will send it FREE as a premium for sending us ONE NEW subscriber to the Bee Journal for a year at \$1.00; or for \$1.10 we will mail the Bee Journal one year and the Clipping Device.

GEORGE W. YORK & CO.,

118 Michigan Street, CHICAGO, ILL.

HONEY and BEESWAX

MARKET QUOTATIONS.

Chicago, Nov. 19.—Our market is very strong at 13c for best grades of white comb honey, with good No. 1 at 11 to 12c; ambers range from 8 to 11c, according to appearance, quality and flavor. Extra led, white, 6 to 7c; amber, 5 to 6c; dark, 5c. Beeswax, 27c. All grades and kinds of honey are salable at this time.

R. A. BURNETT & CO.

San Francisco, Nov. 2.—White comb, 9½ to 10½c; amber, 7½ to 9c. Extracted, white, 7 to 7½c; light amber, 6½ to 6¾c. Beeswax, 24 to 27c.

There is so little extracted now offering that it is hardly quotable in a wholesale way. Comb is in fair supply and is being very steadily held, altho with the demand for same almost wholly local, the movement is not very rapid.

St. Louis, Sept. 9.—Fancy white comb, 12 to 12½c; A No. 1 white, 10 to 11c; No. 1 white, 9 to 10c; dark and partially filled from 5 to 8c, as to quality. Extracted in cases, No. 1 white, 6 to 6½c; No. 2, 5½c; amber, 5c; in barrels, No. 1 white, 5½c; amber, 4½ to 5c; dark, 4 to 4½c. Choice Beeswax, prime, 24c; choice, 24½c. At present there is a good demand for honey.

WESTCOTT COM. CO.

Kansas City, Sept. 9.—Fancy white comb, 12 to 13c; No. 1, 11 to 12c; amber, 10 to 11c. Extracted, white, 5½ to 6c; amber, 5 to 5½c; dark, 4½ to 5c. Beeswax, 22 to 25c.

The receipts of comb honey are larger.

C. C. ULEMONS & CO.

Boston, Sept. 30.—Our honey market shows a decided firmer tone since our last. A few sales have been made at 15c for an extra fancy lot, while almost all sales ranging from A No. 1 to fancy now are made at 14c, while occasionally, something a little off, will bring as low as 12½ to 13c. We do not look to see any lower prices.

Extracted, Florida, in barrels, mostly 6c to 7c, with a good demand. Beeswax, slow sale at 26c for best.

BLAKE, SCOTT & LEE.

Indianapolis, Oct. 3.—Fancy white comb honey, 12 to 12½c; No. 1, 10 to 11c. Demand fairly good. Tar-colored comb honey, 8 to 9c, with almost no demand. Clover and basswood extracted honey, 6½ to 7c. Beeswax, 23 to 27c.

WALTER S. POWDER.

Milwaukee, Oct. 18.—Fancy 1 pounds, 12½ to 13c; A No. 1, 12 to 12½c; No. 1, 11 to 12c; No. 2, 10 to 10½c; mixt, amber and dark, 8 to 9c. Extracted, white, in barrels, kegs and pails, 6½ to 7c; dark, 5 to 5½c. Beeswax, 26 to 27c.

This market is in good condition for the best grades of honey, either comb or extracted. The receipts of the new crop are very fair, and some of very nice quality. The demand has been and continues to be very good, and values are firm on fancy grades and straight, uniform packing.

A. V. BISHOP & CO.

Columbus, O., Nov. 18.—Market somewhat easier. Quote: Fancy, 14c; No. 1, 12c; No. 2, 10c; amber, 9c; buckwheat, 8c.

COLUMBUS COM. AND STORAGE CO.

New York, Oct. 22.—Receipts of comb honey are large, and there is quite a stock now on the market. While white is in good demand, buckwheat and mixt seem to be somewhat neglected, and quotation prices have to be shaded in order to sell in quantity lots. We quote:

Fancy white, 13 to 14c; No. 1 white, 11 to 12c; amber, 10c; mixt and buckwheat, 8 to 9c. Stocks of extracted are light of all kinds. Demand is good at following prices: White, 6 to 6½c; amber, 5½c; dark, 5c. Southern, in half barrels and barrels at from 55c to 60c a gallon. Beeswax dull at 26c.

HILDRETH BROS. & SEGELKEN.

Detroit, Oct. 20.—Honey in better demand and better prices as follows: Fancy white, 13 to 14c; No. 1, 12 to 13c; fancy dark and amber, 10 to 11c. Extracted, white, 6 to 7c; dark, 5 to 5½c. Beeswax, 25 to 26c.

M. H. HUNT.

Minneapolis, Oct. 20.—Fancy white clover comb is now selling at 11 to 12c; amber, 10½c. Extracted fancy white clover, 5½c; amber, 4½ to 5c. Dark grades, both comb and extracted, not wanted at low prices.

S. H. HALL & CO.

Buffalo, Nov. 11.—Strictly fancy honey is very scarce and held at 13c; occasionally 14c; but it must be perfect goods; fair to good white, 11 to 12c; if much soiled, 9 to 10c; dark grades, 7 to 8c. Trade is good for all qualities and no large stocks in market. Extracted, 5 to 6c. Beeswax, 24 to 28c.

BATTENSON & CO.

The Usual Fall Discount *****

Is Now Allowed on Orders.
If you want

Shipping Cases, Crates,
Extractors,

Or anything else, write to us. Catalog
Free. Sample Copy

American Bee-Keeper,

(Monthly, 50c a year) FREE. Address,

THE W. T. FALCONER MFG. COMPANY

JAMESTOWN, N. Y.

Please mention Bee Journal when writing.

Apiarian Supplies!

Wholesale and Retail.

A FULL LINE KEPT IN STOCK

Very Low Prices.

Write for an estimate on what you want.

I. J. STRINGHAM,

105 Park Place, NEW YORK.

Please mention Bee Journal when writing.

CARLOADS—



Of Bee-Hives, Sections, Ship-
ping-Cases, Comb Foundation,
and Everything used in the
Bee-Industry.

We want the name and ad-
dress of every Bee-Keeper in
America. We supply Deal-
ers as well as consumers. We
have Dry Kiln, Improved Machinery, 40,000
feet of floor space, and all modern appliances.
We make prompt shipment.

Write for Catalogs, Quotations, etc.

Inter-State Manufacturing Co.,

HUDSON, St. Croix Co., WIS.

Please mention Bee Journal when writing.

IF YOU WANT THE

BEE-BOOK

That covers the whole Apicultural Field more
completely than any other published, send
\$1.25 to Prof. A. J. Cook, Claremont, Calif.,
for his

Bee-Keeper's Guide.

Liberal Discounts to the Trade.



MAKE HENS PAY!

If you want to know how others do this, send
for our Catalogue and Poultry Guide. It tells
all about the poultry business and about the
CYPHERS INCUBATOR
which embodies all the good points of other
machines and the faults of none. Sent freight
paid to every buyer. Catalogue 10c. Circulars free.
The Cyphers Incub. Co. Box 50, Wayland, N.Y.

Please mention Bee Journal when writing.

California

If you care to know of its Fruits, Flowers
Climate or Resources, send for a Sample Copy
of California's Favorite Paper—

The Pacific Rural Press

The leading Horticultural and Agricultural
paper of the Pacific Coast. Published weekly.
handsomely illustrated \$2.00 per annum.
Sample Copy Free.

PACIFIC RURAL PRESS,

330 Market St., SAN FRANCISCO, CAL.

Please mention Bee Journal when writing.

21st Year Dadant's Foundation. 21st Year

**Why does it sell
so Well?**

Because it has always given better satis-
faction than any other.
Because **IN 21 YEARS** there have
not been any complaints, but thou-
sands of compliments.

**We Guarantee
Satisfaction.**

What more can anybody do? Beauty,
Purity, Firmness, No Sag-
ging. No Loss.
**PATENT WEED PROCESS
SHEETING.**

Send Name for our Catalog, Samples of Foundation and Veil Material. We sell
the best VEILS, cotton or silk.

BEE-KEEPERS' SUPPLIES OF ALL KINDS.

LANGSTROTH ON THE HONEY-BEE, Revised.
The Classic in Bee-Culture—Price, \$1.25, by mail.

**BEESWAX WANTED
AT ALL TIMES.**

CHAS. DADANT & SON,

HAMILTON, Hancock Co., ILL.

Please mention the Am. Bee Journal.

OUR MOTTO—"Well Manufactured Stock! Quick Shipments!"

SECTIONS, SHIPPING-CASES, —AND— BEE-KEEPERS' SUPPLIES.

We make a specialty of making the very best Sections on the market.
The **BASSWOOD** in this part of Wisconsin is acknowledged by all to be the
best for making the **One-Piece Honey-Sections**—selected, young, and
thrifty timber is used.

Write for Illustrated Catalog and Price-List FREE.

MARSHFIELD MFG. CO., Marshfield, Wis.

Please mention the American Bee Journal when writing.

Gleanings at Half Price,

—or, Two Papers for the Price of One.

We have made arrangements whereby, for a limited time, we can send either the Farm
Journal, published at Philadelphia, or the Poultry-Keeper, published at Parkesburg, Pa., both
fifty-cent monthlies, and the very best in their line, with **Gleanings in Bee-Culture**, to a
new or old subscriber, both for one year. But the conditions of this offer are that the money
[\$1.00] shall be sent in advance, and that all arrearages to Gleanings, if any, shall be squared
up.

**The Ohio Farmer and Gleanings in Bee-Culture
both for One Year for \$1.10.**

We will send the Ohio Farmer, a dollar weekly, one of the leading agricultural papers of
the United States, and Gleanings in Bee-Culture, both for one year, to a new or old subscriber,
for \$1.10, paid in advance, and all arrearages to Gleanings, if any, squared up.

The Farm Journal is now in its 21st year, and takes the lead among all the low-priced
agricultural papers. It is packed full of practical hints and suggestions; puffs no swindles, and
inserts no humbug advertisements.

The Ohio Farmer is a larger paper, and is issued weekly, and is one out of a few really
good farm papers.

The Poultry-Keeper is monthly, edited by P. H. Jacobs, and published at Parkes-
burg, Pa. It has a tinted cover in two colors, and is beautifully gotten up.

Remember that, in order to secure any one of these three papers, in combination with
Gleanings, the money must be paid in advance, and arrears to Gleanings, if any, squared up.
These offers are very low, and will be withdrawn soon.

**THE A. I. ROOT CO.,
MEDINA, OHIO.**